

<400> 1058

Glu Phe Pro Ala Arg Val Thr Pro Val Ala Glu Gln Leu Gly Val Ser
 1 5 10 15
 Leu Thr Leu His Pro Asp Asp Pro Pro Arg Pro Leu Phe Gly Leu Pro
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 Arg Ile Ala Ser Ser Ala Glu Asp Tyr Gln Ala Leu Phe Asp Ala Val
 35 40 45
 Pro Ser Lys Ala Asn Gly Ile Cys Leu Cys Thr Gly Ser Leu Gly Val
 50 55 60
 Arg Ala Glu Asn Asp Leu Pro Glu Met Ala Glu Arg Phe Gly Pro Arg
 65 70 75 80
 Ile Ala Phe Ala His Leu Arg Ala Thr Lys Arg Asp Ala Asp Gly Leu
 85 90 95
 Ser Phe His Glu Ser Asp His Leu Asp Gly Asp Val Asp Met Val Ala
 100 105 110
 Cys

<210> 1059

<211> 372

<212> DNA

<213> Homo sapiens

<400> 1059

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 120
 gccgacatcc tgatcgacga aggtttcacc ggtatcgagg aaatcgcccta cgtcccccag
 180
 caggaactgc tggagatcga ggcgttcgac gaagacacca tcaacgagtt gcgcgcccgt
 240
 gcccgcaatg cgctgctgac cgaggccatc gccaggaag agcgccttga gaccgcgcag
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 360
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 372

<210> 1060

<211> 124

<212> PRT

<213> Homo sapiens

<400> 1060

Xaa Leu Thr Gly Trp Gln Ile Asn Ile Met Thr Pro Glu Glu Ser Val
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 20 25 30
 Lys Leu Asp Val Asp Glu Glu Val Ala Asp Ile Leu Ile Asp Glu Gly
 35 40 45
 Phe Thr Gly Ile Glu Glu Ile Ala Tyr Val Pro Met Gln Glu Leu Leu
 50 55 60
 Glu Ile Glu Ala Phe Asp Glu Asp Thr Ile Asn Glu Leu Arg Ala Arg

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65          70          75          80
Ala Arg Asn Ala Leu Thr Glu Ala Ile Ala Gln Glu Glu Arg Leu
          85          90          95
Glu Thr Ala Gln Asp Leu Leu Glu Leu Glu Gly Val Thr Pro Glu Leu
          100          105          110
Ala Ala Lys Leu Ala Glu Arg Gln Val Arg Thr Arg
          115          120

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<210> 1061
 <211> 456
 <212> DNA
 <213> Homo sapiens

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<400> 1061
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120
gagaaggagg attctggagc attgtatttg gcagccggag cgggcagtgg gcgggggggtt
180
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240
cttcgcagcg accctcgggg gtccatggag ccgcctgcct tcgccccctc gctcttccca
300
ggtctgaacc tggatgggga gaagaaattg aagtgttttg gagacggggg ggcttaaaac
360
actagggagc ctcacgcgcc agccttgggc ccactttcct ttgatcgtg aggattccgc
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456

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<210> 1062
 <211> 125
 <212> PRT
 <213> Homo sapiens

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<400> 1062
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1          5          10          15
Phe Leu Leu Pro Ile Gln Val Gln Thr Trp Glu Glu Arg Gly Gly Glu
20          25          30
Gly Arg Arg Leu His Gly Pro Pro Arg Val Ala Ala Lys Pro Val Phe
35          40          45
Ser Pro Leu Gly Gln Lys Arg His Arg Gly Pro Lys Ser Pro Ser Cys
50          55          60
Pro Asn Pro Pro Pro Thr Ala Arg Ser Gly Cys Gln Ile Gln Cys Ser
65          70          75          80
Arg Ile Leu Leu Leu Leu Ser Ala Pro Lys His Leu Gln Pro Leu Leu
85          90          95
Gly Leu Gln Lys Gly Phe Leu Glu Gly Ala Lys Gly Thr Phe Tyr Leu
100          105          110
Ser Tyr Leu Pro Ala Gln Pro Gly Ala Met Glu Ser Arg
115          120          125

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<210> 1063
<211> 3760
<212> DNA
<213> Homo sapiens

<400> 1063
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120
taaggtctta taactagtaa atatctgcat taaagaacga gttgaatgaa aattctgata
180
aattcctact taaagtgtat ccaaagaaaa cggaaaaagt ctaggagtta gtgatattag
240
attcagaaga atgagctttg taattcttaa aaattagtct cagaatagaa aggattttaa
300
aagtaattga gtaaagtcac aggaaatgtg accatataaa ggaatggctc taaatgtatt
360
aatccagaag gaagcaacag gttaaacagt aagaggtaag aaacaaaaaa taaggaacga
420
gagagagaga gtgacaggga gagagagaca gagcggggaa ggagagaatg agaaggaaaa
480
tcaggaaaac gaggagaaac agaattaagg aggtgatact ggaatagtat cagaccattc
540
tgaatcaatt taagaattgc catgtctaata tcttatatgg aagatttgaa atacaaggat
600
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660
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720
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780
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840
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1020
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1080
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1140
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1380
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1440

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2040
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2160
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2280
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2520
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2700
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2760
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2880
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2940
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3060

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 3600
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 3660
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 3760

<210> 1064

<211> 483

<212> PRT

<213> Homo sapiens

<400> 1064

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His	Gly	Ser	Pro	Ser	Cys	Thr	Leu	Arg	Arg	Ser	Ala	Val	Lys	Ser	Arg
			20					25					30		
Leu	Gly	Cys	Ala	Val	Ala	Gly	Ser	Ser	Phe	Thr	Ser	Thr	Trp	Asn	Phe
		35				40					45				
Leu	Lys	Ser	Ser	Leu	Leu	Pro	Gly	Met	Gln	His	Ala	Val	Phe	Ser	Ser
	50				55				60						
Met	Gly	Met	Phe	Ser	Ala	Ser	Ser	Leu	Val	Thr	Ala	Leu	Leu	Leu	Leu
65				70					75					80	
Arg	Thr	Pro	Leu	Thr	Pro	Ser	Ser	Arg	Pro	Arg	Ala	Gly	Arg	Trp	His
			85					90					95		
Leu	Ser	Cys	Ser	Ser	Ser	Ala	Ser	Ser	Phe	Arg	Ala	Leu	Leu	Cys	Trp
		100				105					110				
Thr	Ser	Arg	Leu	Leu	Leu	Ser	Arg	Ser	Leu	Cys	Ser	Val	Ala	Arg	Ser
	115				120					125					
Ser	Ala	Ser	Ser	Arg	Leu	Ser	Tyr	Gln	Val	Lys	Leu	Gln	Met	Ala	Leu
	130				135				140						
Glu	Leu	Met	Arg	Lys	Glu	Leu	Glu	Asp	Ala	Leu	Thr	Gln	Glu	Ala	Asn
145				150					155					160	
Val	Gly	Lys	Lys	Thr	Val	Ile	Trp	Lys	Glu	Lys	Val	Glu	Met	Gln	Arg
			165				170					175			
Gln	Arg	Phe	Arg	Leu	Glu	Phe	Glu	Lys	His	Arg	Gly	Phe	Leu	Ala	Gln

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<210> 1065
<211> 892
<212> DNA
<213> Homo sapiens
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1006

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 360
 caccagagc agcatcaaga tgcagttggc ggggtactgg aactggcttg gcaagggctg
 420
 cgcaggcaac aggtcccagc aagagtcagc tagcctagct cagccctgca cacctggaga
 480
 cctgggggtg ctccagacac ctcgccctt taggtccctt taattgaatg tgtgtggatc
 540
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 600
 ttagtacctg ccagcttttc ctctcttaca taaatttcat gccagagcct ggaaatgtgt
 660
 gccctttgta ggaggggcat cacaggctgg ctacactcag cagtgccagg cagagcccgt
 720
 ccctctcatt gcaggaggcg catgaagcgt gtctgggacc gagctgtgga gttcctggcc
 780
 tccaacgaat cccggatcca gacggagtc caccgcgttg caggagagga catgctgggtg
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 892

<210> 1066

<211> 76

<212> PRT

<213> Homo sapiens

<400> 1066

Met	Cys	Ala	Leu	Cys	Arg	Arg	Gly	Ile	Thr	Gly	Trp	Leu	Thr	Ser	Ala
1				5					10					15	
Val	Pro	Gly	Arg	Ala	Arg	Pro	Ser	His	Cys	Arg	Arg	Arg	Met	Lys	Arg
			20					25					30		
Val	Trp	Asp	Arg	Ala	Val	Glu	Phe	Leu	Ala	Ser	Asn	Glu	Ser	Arg	Ile
		35					40					45			
Gln	Thr	Glu	Ser	His	Arg	Val	Ala	Gly	Glu	Asp	Met	Leu	Val	Leu	Arg
	50					55				60					
Trp	Thr	Lys	Pro	Ser	Ser	Phe	Ser	Asp	Ser	Glu	Arg				
65					70					75					

<210> 1067

<211> 418

<212> DNA

<213> Homo sapiens

<400> 1067

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 120
 ggactagaca tctggaaagc ccgagtctcc gctgacatcg aaggcgactg gactatgcac
 180
 gttgaaggct ggtcagacac ctggggcacg tggcatcaca atgccaatgc caagctcgcc
 240

gctgccatcg acgtcgaaact ggtgtgcgcc gaaggccatg ccctcataaa cgaggcggtc
 300
 cggcacgccc agcaatccgg ggatactgac gcgatcacgg ctctgcgcca gaccgatgcc
 360
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 418

<210> 1068

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1068

Glu	Phe	Glu	Val	Thr	Ala	Asn	Val	Phe	Arg	Glu	Gly	His	Asp	Ala	Val
1			5					10					15		
Gly	Ala	Ser	Val	Val	Leu	Thr	Asp	Pro	Glu	Gly	Asn	Arg	His	Leu	Thr
			20					25					30		
Asp	Met	His	Gln	Val	Glu	Pro	Trp	Gly	Leu	Asp	Ile	Trp	Lys	Ala	Arg
	35						40					45			
Val	Ser	Ala	Asp	Ile	Glu	Gly	Asp	Trp	Thr	Met	His	Val	Glu	Gly	Trp
	50					55					60				
Ser	Asp	Thr	Trp	Gly	Thr	Trp	His	His	Asn	Ala	Asn	Ala	Lys	Leu	Ala
65					70					75				80	
Ala	Ala	Ile	Asp	Val	Glu	Leu	Val	Cys	Ala	Glu	Gly	His	Ala	Leu	Ile
			85						90					95	
Asn	Glu	Ala	Val	Arg	His	Ala	Glu	Gln	Ser	Gly	Asp	Thr	Asp	Ala	Ile
			100					105					110		
Thr	Ala	Leu	Arg	Glu	Thr	Asp	Ala	Asn	Leu	Thr	Leu	Asp	Arg	Ala	Pro
		115					120						125		
Asp	Ser	Leu	Gln	Gln	Val	Ile	Asn	Thr	Tyr	Ala					
	130						135								

<210> 1069

<211> 371

<212> DNA

<213> Homo sapiens

<400> 1069

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 120
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 180
 ctgcgttatc acctgcaaca gaacgtccac ttcaaggaag aaacagtga gctcttcac
 240
 tgtgagctgg tcatggccct ggactacctg cagaaccagc gcatcattca cagggatatg
 300
 aagcctgaca atattttact tgacgaacat gggcacgtgc acatcacaga tttcaacatt
 360
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 371

<210> 1070

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1070

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Pro Ala Ser Gln Gln Phe Ile Cys Arg His Ser Gln Gly Pro Pro Val
      20           25           30
Asn Ser Lys Gly Ile Ala Cys Ser Phe Ser Gly Ala Glu His Leu Arg
      35           40           45
Cys His Val Arg Leu Gly Ala Ser His Gly Gly Asp Leu Arg Tyr His
      50           55           60
Leu Gln Gln Asn Val His Phe Lys Glu Glu Thr Val Lys Leu Phe Ile
65           70           75           80
Cys Glu Leu Val Met Ala Leu Asp Tyr Leu Gln Asn Gln Arg Ile Ile
      85           90           95
His Arg Asp Met Lys Pro Asp Asn Ile Leu Leu Asp Glu His Gly His
      100          105          110
Val His Ile Thr Asp Phe Asn Ile Ala Ala Met
      115          120

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<210> 1071

<211> 998

<212> DNA

<213> Homo sapiens

<400> 1071

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120
cccacccgaa gtacgtggcc ttggagtgcc attcgcactc cacttggcca ccgtttgcat
180
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240
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600
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660
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720
cgagattagc cacatacatg accatgtggt ccttgggtca gcacgcgaag aaaatgccaa
780

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<210> 1072

<211> 72

<212> PRT

<213> Homo sapiens

<400> 1072

Met	Gly	His	Thr	Ala	Ser	Asn	Lys	Asp	Asp	Leu	Leu	Lys	Arg	Val	Lys
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Arg	Ile	Ala	Gly	Gln	Ile	Gln	Ala	Val	Glu	Arg	Ala	Leu	Glu	Ser	Asp
		20					25				30				
Ala	Asp	Cys	Ala	Lys	Thr	Leu	His	Leu	Val	Ala	Ala	Thr	Arg	Gly	Ala
		35				40				45					
Ile	Asn	Gly	Leu	Met	Asp	Glu	Ile	Ile	Glu	Asp	His	Ala	Arg	Lys	His
	50				55				60						
Val	Ala	Ser	Pro	Thr	Leu	Ser	Asp								
65					70										

<210> 1073

<211> 468

<212> DNA

<213> Homo sapiens

<400> 1073

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120
ttccccact gataaaatct tgcttctctt caaactccta ggcaaatttc tctactttca
180
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300
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360
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aaattttgtt gtgcttatgc agatacagat gccactaaac actgatca
468

<210> 1074

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1074

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 20 25 30
 Gly Lys Phe Leu Leu Leu Gln Lys Val Leu Phe Leu His Ile Leu Arg
 35 40 45
 Asn His His Leu Val His Met Leu Lys Ala Glu Phe Ile Val Ser Ser
 50 55 60
 Pro Ser Leu Ser Asn Ser Phe Ala Gln Thr Leu Arg Tyr Ser Phe Ile
 65 70 75 80
 Leu Cys Ile Ile Phe Gly Phe His Leu Phe Met Asn Ser Phe Val Phe
 85 90 95
 Ser Leu Leu Ala Leu Glu Pro Arg Thr Tyr His Gly Phe Lys Val Cys
 100 105 110
 Phe Asn Glu Leu Asn Gly Ile Asn Phe Val Val Leu Met Gln Ile Gln
 115 120 125
 Met Pro Leu Asn Thr Asp
 130

<210> 1075

<211> 1633

<212> DNA

<213> Homo sapiens

<400> 1075

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 120
 gcgcctgctg atcctgcccc aggaggagga ctatggcttt gacatcgagg agaagaacaa
 180
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 240
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 1080
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 1200
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 1260
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 1320
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<210> 1076

<211> 87

<212> PRT

<213> Homo sapiens

<400> 1076

His Gln Ala Gly Glu His Trp Pro Glu Asp Cys Leu Leu Pro Gly Val
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 20 25 30
 Pro Gly Ala Pro Pro Ala Val Trp Pro Thr Ser Ala Pro Pro Ile Ala
 35 40 45
 Thr Ser Thr Ser Trp Lys Cys Pro Thr Pro Arg Pro Pro Pro Gln Trp
 50 55 60
 Ala Gly Pro Ser Ala Ser Ala Leu Asp Ala Asn Pro Pro Ser Ser Ala
 65 70 75 80
 Leu Thr Arg Ser Lys Ala Thr
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<210> 1077

<211> 419

<212> DNA

<213> Homo sapiens

<400> 1077

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 180
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 240
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 300
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<210> 1078

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1078

Xaa	Arg	Val	Thr	Arg	Leu	Ala	Thr	Arg	Leu	His	Ser	Met	Ser	Thr	Lys
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Trp	Thr	Cys	Asn	Ala	Asn	Glu	Ala	Thr	Cys	Leu	Arg	Leu	Ala	Gly	Ala
			20					25					30		
Pro	Ser	Pro	Ser	Asp	Ala	Leu	Phe	His	Pro	Glu	Phe	Thr	Tyr	Pro	Ile
			35				40					45			
Phe	Gly	Glu	Ala	Glu	Ala	Ile	Tyr	Gly	Tyr	Asn	Gly	Leu	His	Met	Asn
	50					55					60				
Leu	Ala	Phe	Ala	Ser	Gly	Ser	Leu	Val	Pro	Ser	Leu	Glu	Ile	Thr	Tyr
	65				70					75				80	
Arg	Ala	Lys	Asn	Thr	Thr	Ser	Ala	Lys	Val	Asp	Asp	Val	Glu	Gln	
			85					90					95		
Ala	Leu	Arg	Gly	Val	Leu	Pro	Pro	Asp	Val	Val	Thr	Pro	Ala	Glu	Leu
			100					105					110		
Asp	Ala	Ile	Val	Ala	Arg	Asp	Ala	Arg	Ala	Val	Arg	Ala	His	Leu	Arg
		115					120					125			
Arg	Arg	Ala	Pro	Arg	Leu	Arg	Arg	Thr	Leu	Ala					
		130					135								

<210> 1079

<211> 584

<212> DNA

<213> Homo sapiens

<400> 1079

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 120
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 180
 ttctatttag gtcttgtgac acaacagtgg gcaaggtgat gccctctgtg accaaaagta
 240

tttaccceaa gttccccag gccctccctt tegtctgcaa agacacacat ctgtttcact
 300
 gtgtcttctg caaagacaca catctgtttc actgggggtt tctgcaaaga caccatttg
 360
 tttccctttt taagggtttt cccctccatc ttgtctattt ttaaaaaaat aaaccgggtt
 420
 cccaggatag ccttcccccc cagatcaaga gcccatgtga aatgaggggg ccgacttgac
 480
 cacagacct tgttcctttc tgtaatctag acacttctgc acaatagagg gccaccctt
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 584

<210> 1080

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1080

Met	Leu	His	Val	Val	Ser	Ala	Ser	Gln	Pro	Trp	Glu	Met	Tyr	Pro	His
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Ala	Val	Ala	Ser	Thr	Ile	Gly	Leu	Leu	Phe	Leu	Leu	Cys	Ser	Asn	Cys
			20				25					30			
Phe	Pro	Ser	Gln	Gln	Gly	Gly	Glu	Pro	Cys	Cys	Leu	Leu	Thr	Trp	Val
		35				40					45				
Val	Leu	Phe	Arg	Ser	Cys	Asp	Thr	Thr	Val	Gly	Lys	Val	Met	Pro	Ser
	50				55				60						
Val	Thr	Lys	Ser	Ile	Tyr	Pro	Lys	Phe	Pro	Gln	Ala	Leu	Pro	Phe	Val
65				70				75				80			
Cys	Lys	Asp	Thr	His	Leu	Phe	His	Cys	Val	Phe	Cys	Lys	Asp	Thr	His
			85				90					95			
Leu	Phe	His	Trp	Gly	Phe	Leu	Gln	Arg	His	Pro	Phe	Val	Ser	Pro	Phe
		100					105					110			
Lys	Gly	Phe	Pro	Leu	His	Leu	Val	Tyr	Phe						
		115				120									

<210> 1081

<211> 3077

<212> DNA

<213> Homo sapiens

<400> 1081

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 120
 tatatccaca atgggaagaa atccagggcc ttaagccccc tatctctgtt ggccatagag
 180
 cagacatctc ttaagatgat gcaggcagta ggagggtgcac ctgcacgtcc cactggagaa
 240
 tatatctgta atcaatgtgg tgctaagtac acatccctag acagctttca gactcaccta
 300
 aaaactcatc tcgacactgt gtttccaaaa ttgacctgtc ctcaagtcaa caaggaattc
 360

cccaaccaag aatccttgct gaagcatggt accattcact ttatgatcac ttcaacgtat
420
tacatctgtg agagttgtga caagcaattc acatcagtggt atgaccttca gaaacacctg
480
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540
aaagtctcca ttcagctcca cttggctgtg aagcacagta acgaaaagaa agtctatagg
600
tgcacatctt gcaactggga cttccgcaac gaaactgact tgcagctcca tgtgaaacac
660
aaccacctgg aaaaccaagg gaaagtgcatt aagtgcattt tctgcggtga gtcctttggc
720
accgaggtgg agctgcaatg ccacatcacc actcacagta agaagtacaa ctgcaagttc
780
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1020
gcctacacta tggaaacttt gctgcagaat caccagctcc gagaccacaa catcagacct
1080
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1140
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2040

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 2160
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 2220
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 2280
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 2400
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 2460
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 2580
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 2700
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 2760
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 2820
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 3077

<210> 1082

<211> 757

<212> PRT

<213> Homo sapiens

<400> 1082

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Ile	Phe	Asn	Ser	Val	Leu	Lys	Leu	Asn	Lys	His	Ile	Lys	Glu	Asn	His
		20						25				30			
Lys	Asn	Ile	Pro	Leu	Ala	Leu	Asn	Tyr	Ile	His	Asn	Gly	Lys	Lys	Ser
		35						40				45			
Arg	Ala	Leu	Ser	Pro	Leu	Ser	Pro	Val	Ala	Ile	Glu	Gln	Thr	Ser	Leu
	50					55					60				
Lys	Met	Met	Gln	Ala	Val	Gly	Gly	Ala	Pro	Ala	Arg	Pro	Thr	Gly	Glu
65			70						75					80	
Tyr	Ile	Cys	Asn	Gln	Cys	Gly	Ala	Lys	Tyr	Thr	Ser	Leu	Asp	Ser	Phe

										85											90											95
Gln	Thr	His	Leu	Lys	Thr	His	Leu	Asp	Thr	Val	Leu	Pro	Lys	Leu	Thr																	
										100											105											110
Cys	Pro	Gln	Cys	Asn	Lys	Glu	Phe	Pro	Asn	Gln	Glu	Ser	Leu	Leu	Lys																	
										115											120											125
His	Val	Thr	Ile	His	Phe	Met	Ile	Thr	Ser	Thr	Tyr	Tyr	Ile	Cys	Glu																	
										130											135											140
Ser	Cys	Asp	Lys	Gln	Phe	Thr	Ser	Val	Asp	Asp	Leu	Gln	Lys	His	Leu																	
										145											150											155
Leu	Asp	Met	His	Thr	Phe	Val	Phe	Phe	Arg	Cys	Thr	Leu	Cys	Gln	Glu																	
										165											170											175
Val	Phe	Asp	Ser	Lys	Val	Ser	Ile	Gln	Leu	His	Leu	Ala	Val	Lys	His																	
										180											185											190
Ser	Asn	Glu	Lys	Lys	Val	Tyr	Arg	Cys	Thr	Ser	Cys	Asn	Trp	Asp	Phe																	
										195											200											205
Arg	Asn	Glu	Thr	Asp	Leu	Gln	Leu	His	Val	Lys	His	Asn	His	Leu	Glu																	
										210											215											220
Asn	Gln	Gly	Lys	Val	His	Lys	Cys	Ile	Phe	Cys	Gly	Glu	Ser	Phe	Gly																	
										225											230											235
Thr	Glu	Val	Glu	Leu	Gln	Cys	His	Ile	Thr	Thr	His	Ser	Lys	Lys	Tyr																	
										245											250											255
Asn	Cys	Lys	Phe	Cys	Ser	Lys	Ala	Phe	His	Ala	Ile	Ile	Leu	Leu	Glu																	
										260											265											270
Lys	His	Leu	Arg	Glu	Lys	His	Cys	Val	Phe	Glu	Thr	Lys	Thr	Pro	Asn																	
										275											280											285
Cys	Gly	Thr	Asn	Gly	Ala	Ser	Glu	Gln	Val	Gln	Lys	Glu	Glu	Val	Glu																	
										290											295											300
Leu	Gln	Thr	Leu	Leu	Thr	Asn	Ser	Gln	Glu	Ser	His	Asn	Ser	His	Asp																	
										305											310											315
Gly	Ser	Glu	Glu	Asp	Val	Asp	Thr	Ser	Glu	Pro	Met	Tyr	Gly	Cys	Asp																	
										325											330											335
Ile	Cys	Gly	Ala	Tyr	Thr	Met	Glu	Thr	Leu	Leu	Gln	Asn	His	Gln																		
										340											345											350
Leu	Arg	Asp	His	Asn	Ile	Arg	Pro	Gly	Glu	Ser	Ala	Ile	Val	Lys	Lys																	
										355											360											365
Lys	Ala	Glu	Leu	Ile	Lys	Gly	Asn	Tyr	Lys	Cys	Ser	Val	Cys	Ser	Arg																	
										370											375											380
Thr	Phe	Phe	Ser	Glu	Asn	Gly	Leu	Arg	Glu	His	Met	Gln	Thr	His	Leu																	
										385											390											395
Gly	Pro	Val	Lys	His	Tyr	Met	Cys	Pro	Ile	Cys	Gly	Glu	Arg	Phe	Pro																	
										405											410											415
Ser	Leu	Leu	Thr	Leu	Thr	Glu	His	Lys	Val	Thr	His	Ser	Lys	Ser	Leu																	
										420											425											430
Asp	Thr	Gly	Asn	Cys	Arg	Ile	Cys	Lys	Met	Pro	Leu	Gln	Ser	Glu	Glu																	
										435											440											445
Glu	Phe	Leu	Glu	His	Cys	Gln	Met	His	Pro	Asp	Leu	Arg	Asn	Ser	Leu																	
										450											455											460
Thr	Gly	Phe	Arg	Cys	Val	Val	Cys	Met	Gln	Thr	Val	Thr	Ser	Thr	Leu																	
										465											470											475
Glu	Leu	Lys	Ile	His	Gly	Thr	Phe	His	Met	Gln	Lys	Thr	Gly	Asn	Gly																	
										485											490											495
Ser	Ala	Val	Gln	Thr	Thr	Gly	Arg	Gly	Gln	His	Val	Gln	Lys	Leu	Tyr																	
										500											505											510
Lys	Cys	Ala	Ser	Cys	Leu	Lys	Glu	Phe	Arg	Ser	Lys	Gln	Asp	Leu	Val																	

515 520 525
 Lys Leu Asp Ile Asn Gly Leu Pro Tyr Gly Leu Cys Ala Gly Cys Val
 530 535 540
 Asn Leu Ser Lys Ser Ala Ser Pro Gly Ile Asn Val Pro Pro Gly Thr
 545 550 555 560
 Asn Arg Pro Gly Leu Gly Gln Asn Glu Asn Leu Ser Ala Ile Gly Glu
 565 570 575
 Arg Gln Gly Gly Gly Thr Glu Thr Arg Cys Ser Ser Cys Asn Val Lys
 580 585 590
 Phe Glu Ser Glu Ser Glu Leu Gln Asn His Ile Gln Thr Ile His Arg
 595 600 605
 Glu Leu Val Pro Asp Ser Asn Ser Thr Gln Leu Lys Thr Pro Gln Val
 610 615 620
 Ser Pro Met Pro Arg Ile Ser Pro Ser Gln Ser Asp Glu Lys Lys Thr
 625 630 635 640
 Tyr Gln Cys Ile Lys Cys Gln Met Val Phe Tyr Asn Glu Trp Asp Ile
 645 650 655
 Gln Val His Val Ala Asn His Met Ile Asp Glu Gly Leu Asn His Glu
 660 665 670
 Cys Lys Leu Cys Ser Gln Thr Phe Asp Ser Pro Ala Lys Leu Gln Cys
 675 680 685
 His Leu Ile Glu His Ser Phe Glu Gly Met Gly Gly Thr Phe Lys Cys
 690 695 700
 Pro Val Cys Phe Thr Val Phe Val Gln Ala Asn Lys Leu Gln Gln His
 705 710 715 720
 Ile Phe Ser Ala His Gly Gln Glu Asp Lys Ile Tyr Asp Cys Thr Gln
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 740 745 750
 Thr Gln His Ser Ser
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<210> 1083

<211> 516

<212> DNA

<213> Homo sapiens

<400> 1083

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 240
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 300
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 360
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 420
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 480

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516

<210> 1084
<211> 142
<212> PRT
<213> Homo sapiens

<400> 1084
Ala Arg Gly Arg Gly Glu Glu Val Thr Asp Pro Leu Thr Pro Val Leu
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Ser Ala Asn Trp Asp Glu Glu Arg Ser Trp Lys Leu Leu Asn Tyr Glu
20 25 30
Arg Gln Gly Gly Tyr Thr Gly Leu Arg Lys Ala Leu Thr Met Pro Pro
35 40 45
Asp Asp Val Val Ser Leu Val Lys Asp Ala Asn Leu Arg Gly Arg Gly
50 55 60
Gly Ala Gly Phe Pro Thr Gly Met Lys Trp Ser Phe Val Pro Lys Asp
65 70 75 80
Asn Pro Asn Pro Thr Tyr Leu Val Val Asn Gly Asp Glu Ser Glu Pro
85 90 95
Gly Thr Cys Lys Asp Met Pro Leu Met Met Ala Ser Pro His Thr Leu
100 105 110
Val Glu Gly Val Ile Ile Ala Ser Tyr Ala Ile Lys Ala Lys Met Ala
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Phe Ile Tyr Ile Arg Gly Glu Val Leu His Val Val Arg Arg
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<210> 1085
<211> 374
<212> DNA
<213> Homo sapiens

<400> 1085
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120
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240
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374

<210> 1086
<211> 110
<212> PRT
<213> Homo sapiens

<400> 1086

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Phe Phe Tyr Arg Asp Ile Tyr Lys Ser Asp Tyr Ser Phe Asp Leu His
          35           40           45
Gln Asp Tyr Glu Arg Ser Lys Glu Asn Phe Leu Lys Met Ile Gly Asp
          50           55           60
Ser Leu Leu Ala Glu Leu Asn Leu Val Asp Ile Asp Thr Val Arg Lys
65           70           75           80
Ile Ala Asn Ser Pro Leu Gly Ser Ser Glu Thr Leu Tyr Asp Phe Glu
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<210> 1087

<211> 423

<212> DNA

<213> Homo sapiens

<400> 1087

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<210> 1088

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1088

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Asp His Gly Val Ser Ile Arg Val Xaa His His Cys Ala Trp Pro Ile
          35           40           45
His Arg Ser Leu Gly Val Gln Ser Thr Ala Arg Ala Ser Phe Tyr Phe
          50           55           60
Tyr Asn Thr Phe Pro Glu Val Asp Ala Leu Ala Ser Ala Val Arg Ala

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90

95

<210> 1091
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35 40 45
His Phe Phe Gly Arg Pro Leu Lys Glu Leu Asn Ile Asp Glu Phe Ala
50 55 60
Leu Leu Val Gly Met Val Lys Gly Pro Ser Ile Tyr Asn Pro Glu Arg
65 70 75 80
His Pro Lys Arg Ala Leu Ser Arg Arg Asn Thr Val Leu Ala Ile Leu
85 90 95
Lys Ser Gln Asp Arg Leu Thr Glu Ser Asp Tyr Asn Ile Leu Arg Lys
100 105 110
Gln Pro Ile Arg Leu Ala Asp Lys His Gln Glu Arg Ser Val Tyr Gly
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<210> 1093

<211> 351

<212> DNA

<213> Homo sapiens

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<210> 1094

<211> 117

<212> PRT

<213> Homo sapiens

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			20					25					30		
Leu	Glu	Glu	Phe	Gly	Asp	Asp	Phe	Asp	Ala	Arg	Met	Gly	Ala	Glu	Ala
		35					40					45			
Val	Arg	Glu	Leu	Leu	His	Ala	Ile	Asp	Leu	Glu	His	Glu	Ile	Gly	Arg
	50				55					60					
Leu	Arg	Glu	Gln	Ile	Pro	Gln	Thr	Asn	Ser	Glu	Thr	Lys	Ile	Lys	Lys
65				70					75					80	
Leu	Ser	Lys	Arg	Leu	Lys	Leu	Met	Glu	Ala	Phe	Gln	Gly	Ser	Gly	Asn
			85					90						95	
Leu	Pro	Glu	Trp	Met	Val	Leu	Thr	Val	Leu	Pro	Val	Leu	Pro	Pro	Asp
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Leu	Arg	Pro	Leu	Val											
			115												

<210> 1095

<211> 619

<212> DNA

<213> Homo sapiens

<400> 1095

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 180

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 240
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 360
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 420
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 480
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<210> 1096

<211> 195

<212> PRT

<213> Homo sapiens

<400> 1096

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			20					25					30		
Gln	Leu	Arg	Gln	Gly	Ser	Ala	Gln	Ser	Gln	Arg	Gln	Ile	Arg	Gly	Glu
			35				40					45			
Ile	Asp	Ser	Leu	Arg	Gln	Glu	Lys	Asp	Ser	Leu	Leu	Lys	Gln	Arg	Leu
	50				55					60					
Glu	Ile	Asp	Gly	Lys	Leu	Arg	Gln	Gly	Ser	Leu	Ser	Pro	Glu	Glu	
65				70					75				80		
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Ala	Ile	Glu	Tyr	Lys	Asn	Glu	Ala	Ile	Thr	Cys	Arg	Gln	Arg	Val	Leu
			100				105						110		
Arg	Ala	Ser	Ala	Ser	Leu	Leu	Ser	Gln	Cys	Glu	Met	Asn	Leu	Met	Ala
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Lys	Leu	Ser	Tyr	Leu	Ser	Ser	Ser	Glu	Thr	Arg	Ala	Leu	Leu	Cys	Lys
	130				135					140					
Tyr	Phe	Asp	Lys	Val	Gly	Gln	Gln	Pro	Met	Ala	Pro	Pro	Ala	Pro	Pro
145				150					155					160	
His	Gly	Thr	Cys	Gly	Glu	Val	Ser	His	Gly	Ser	Cys	Ser	Ser	Gly	Tyr
			165					170						175	
Pro	Val	Ser	Ser	Gln	Thr	Gly	Gly	Gln	Asn	Gln	Asp	Gln	Leu	Ile	Cys
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<210> 1097

<211> 5108

<212> DNA

<213> Homo sapiens

<400> 1097

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<211> 1336

<212> PRT

<213> Homo sapiens

<400> 1098

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			20					25					30		
Ser	Ser	Glu	Glu	Ala	Arg	Lys	Leu	Met	Val	Arg	Leu	Thr	Arg	His	Thr
			35				40					45			
Gly	Arg	Lys	Gln	Pro	Pro	Val	Ser	Glu	Ser	His	Trp	Arg	Thr	Leu	Leu
			50				55				60				
Gln	Asp	Met	Leu	Thr	Met	Gln	Gln	Asn	Val	Tyr	Thr	Cys	Leu	Asp	Ser
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Asp	Ala	Cys	Tyr	Glu	Ile	Phe	Thr	Glu	Ser	Leu	Leu	Cys	Ser	Ser	Arg
				85					90					95	
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			100					105						110	
Ser	Glu	Asn	Pro	Pro	Ala	Gly	Ile	Ala	His	Lys	Gly	Lys	Pro	His	Tyr
			115				120					125			
Arg	Val	Ser	Tyr	Glu	Lys	Ser	Ile	Asp	Leu	Val	Leu	Ala	Ala	Ser	Arg
			130				135					140			
Glu	Tyr	Phe	Asn	Ser	Ser	Thr	Asn	Leu	Thr	Asp	Ser	Cys	Met	Asp	Leu
145					150					155				160	
Ala	Arg	Cys	Cys	Leu	Gln	Leu	Ile	Thr	Asp	Arg	Pro	Pro	Ala	Ile	Gln
				165					170					175	
Glu	Glu	Leu	Asp	Leu	Ile	Gln	Ala	Val	Gly	Cys	Leu	Glu	Glu	Phe	Gly
			180					185						190	
Val	Lys	Ile	Leu	Pro	Leu	Gln	Val	Arg	Leu	Cys	Pro	Asp	Arg	Ile	Ser
			195				200					205			
Leu	Ile	Lys	Glu	Cys	Ile	Ser	Gln	Ser	Pro	Thr	Cys	Tyr	Lys	Gln	Ser
			210				215					220			
Thr	Lys	Leu	Leu	Gly	Leu	Ala	Glu	Leu	Leu	Arg	Val	Ala	Gly	Glu	Asn
225					230					235				240	
Pro	Glu	Glu	Arg	Arg	Gly	Gln	Val	Leu	Ile	Leu	Leu	Val	Glu	Gln	Ala
				245					250					255	
Leu	Arg	Phe	His	Asp	Tyr	Lys	Ala	Ala	Ser	Met	His	Cys	Gln	Glu	Leu
			260					265					270		
Met	Ala	Thr	Gly	Tyr	Pro	Lys	Ser	Trp	Asp	Val	Cys	Ser	Gln	Leu	Gly

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Gln Ser Glu Gly Tyr Gln Asp Leu Ala Thr Arg Gln Glu Leu Met Ala		
290	295	300
Phe Ala Leu Thr His Cys Pro Pro Ser Ser Ile Glu Leu Leu Leu Ala		
305	310	315
Ala Ser Ser Ser Leu Gln Thr Glu Ile Leu Tyr Gln Arg Val Asn Phe		
325	330	335
Gln Ile His His Glu Gly Gly Glu Asn Ile Ser Ala Ser Pro Leu Thr		
340	345	350
Ser Lys Ala Val Gln Glu Asp Glu Val Gly Val Pro Gly Ser Asn Ser		
355	360	365
Ala Asp Leu Leu Arg Trp Thr Thr Ala Thr Thr Met Lys Val Leu Ser		
370	375	380
Asn Thr Thr Thr Thr Thr Lys Ala Val Leu Gln Ala Val Ser Asp Gly		
385	390	395
Gln Trp Trp Lys Lys Ser Leu Thr Tyr Leu Arg Pro Leu Gln Gly Gln		
405	410	415
Lys Cys Gly Gly Ala Tyr Gln Ile Gly Thr Thr Ala Asn Glu Asp Leu		
420	425	430
Glu Lys Gln Gly Cys His Pro Phe Tyr Glu Ser Val Ile Ser Asn Pro		
435	440	445
Phe Val Ala Glu Ser Glu Gly Thr Tyr Asp Thr Tyr Gln His Val Pro		
450	455	460
Val Glu Ser Phe Ala Glu Val Leu Leu Arg Thr Gly Lys Leu Ala Glu		
465	470	475
Ala Lys Asn Lys Gly Glu Val Phe Pro Thr Thr Glu Val Leu Leu Gln		
485	490	495
Leu Ala Ser Glu Ala Leu Pro Asn Asp Met Thr Leu Ala Leu Ala Tyr		
500	505	510
Leu Leu Ala Leu Pro Gln Val Leu Asp Ala Asn Arg Cys Phe Glu Lys		
515	520	525
Gln Ser Pro Ser Ala Leu Ser Leu Gln Leu Ala Ala Tyr Tyr Tyr Ser		
530	535	540
Leu Gln Ile Tyr Ala Arg Leu Ala Pro Cys Phe Arg Asp Lys Cys His		
545	550	555
Pro Leu Tyr Arg Ala Asp Pro Lys Glu Leu Ile Lys Met Val Thr Arg		
565	570	575
His Val Thr Arg His Glu His Glu Ala Trp Pro Glu Asp Leu Ile Ser		
580	585	590
Leu Thr Lys Gln Leu His Cys Tyr Asn Glu Arg Leu Leu Asp Phe Thr		
595	600	605
Gln Ala Gln Ile Leu Gln Gly Leu Arg Lys Gly Val Asp Val Gln Arg		
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Phe Thr Ala Asp Asp Gln Tyr Lys Arg Glu Thr Ile Leu Gly Leu Ala		
625	630	635
Glu Thr Leu Glu Glu Ser Val Tyr Ser Ile Ala Ile Ser Leu Ala Gln		
645	650	655
Arg Tyr Ser Val Ser Arg Trp Glu Val Phe Met Thr His Leu Glu Phe		
660	665	670
Pro Phe Thr Asp Ser Gly Leu Ser Thr Leu Glu Ile Glu Asn Arg Ala		
675	680	685
Gln Asp Leu His Leu Phe Glu Thr Leu Lys Thr Asp Pro Glu Ala Phe		
690	695	700
His Gln His Met Val Lys Tyr Ile Tyr Pro Thr Ile Gly Gly Phe Asp		

705					710					715				720
His	Glu	Arg	Leu	Gln	Tyr	Tyr	Phe	Thr	Leu	Glu	Asn	Cys	Gly	Cys
				725					730				735	
Ala	Asp	Leu	Gly	Asn	Cys	Ala	Ile	Lys	Pro	Glu	Thr	His	Ile	Arg
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		755					760				765			
Thr	Asp	Glu	Asn	Met	Ser	Pro	Leu	Glu	Ala	Leu	Glu	Pro	Val	Leu
	770					775					780			
Ser	Gln	Asn	Ile	Leu	Ser	Ile	Ser	Lys	Leu	Val	Pro	Lys	Ile	Pro
785					790				795					800
Lys	Asp	Gly	Gln	Met	Leu	Ser	Pro	Ser	Ser	Leu	Tyr	Thr	Ile	Trp
			805					810						815
Gln	Lys	Leu	Phe	Trp	Thr	Gly	Asp	Pro	His	Leu	Ile	Lys	Gln	Val
		820						825				830		
Gly	Ser	Ser	Pro	Glu	Trp	Leu	His	Ala	Tyr	Asp	Val	Cys	Met	Lys
	835					840					845			
Phe	Asp	Arg	Leu	His	Pro	Gly	Asp	Leu	Ile	Thr	Val	Val	Asp	Ala
850					855					860				
Thr	Phe	Ser	Pro	Lys	Ala	Val	Thr	Lys	Leu	Ser	Val	Glu	Ala	Arg
865				870					875					880
Glu	Met	Thr	Arg	Lys	Ala	Ile	Lys	Thr	Val	Lys	His	Phe	Ile	Glu
			885					890					895	
Pro	Arg	Lys	Arg	Asn	Ser	Glu	Asp	Glu	Ala	Gln	Glu	Ala	Lys	Asp
		900						905				910		
Lys	Val	Thr	Tyr	Ala	Asp	Thr	Leu	Asn	His	Leu	Glu	Lys	Ser	Leu
	915					920					925			
His	Leu	Glu	Thr	Leu	Ser	His	Ser	Phe	Ile	Leu	Ser	Leu	Lys	Asn
930					935					940				
Glu	Gln	Glu	Thr	Leu	Gln	Lys	Tyr	Ser	His	Leu	Tyr	Asp	Leu	Ser
945				950					955					960
Ser	Glu	Lys	Glu	Lys	Leu	His	Asp	Glu	Ala	Val	Ala	Ile	Cys	Leu
			965					970					975	
Gly	Gln	Pro	Leu	Ala	Met	Ile	Gln	Gln	Leu	Leu	Glu	Val	Ala	Val
		980					985					990		
Pro	Leu	Asp	Ile	Ser	Pro	Lys	Asp	Ile	Val	Gln	Ser	Ala	Ile	Met
	995					1000					1005			
Ile	Ile	Ser	Ala	Leu	Ser	Gly	Gly	Ser	Ala	Asp	Leu	Gly	Gly	Pro
1010					1015					1020				
Asp	Pro	Leu	Lys	Val	Leu	Glu	Gly	Val	Val	Ala	Ala	Val	His	Thr
1025				1030					1035					1040
Val	Asp	Lys	Gly	Glu	Glu	Leu	Val	Ser	Pro	Glu	Asp	Leu	Leu	Glu
			1045					1050					1055	
Leu	Arg	Pro	Phe	Cys	Ala	Asp	Asp	Ala	Trp	Pro	Val	Arg	Pro	Arg
		1060						1065				1070		
His	Val	Leu	Gln	Ile	Leu	Gly	Gln	Ser	Phe	His	Leu	Thr	Glu	Glu
	1075					1080					1085			
Ser	Lys	Leu	Leu	Val	Phe	Phe	Arg	Thr	Glu	Ala	Ile	Leu	Lys	Ala
1090					1095					1100				
Trp	Pro	Gln	Arg	Gln	Val	Asp	Ile	Ala	Asp	Ile	Glu	Asn	Glu	Glu
1105			1110					1115						1120
Arg	Tyr	Cys	Leu	Phe	Met	Glu	Leu	Leu	Glu	Ser	Ser	His	His	Glu
			1125					1130					1135	
Glu	Phe	Gln	His	Leu	Val	Leu	Leu	Leu	Gln	Ala	Trp	Pro	Pro	Met
														Lys

1140 1145 1150
 Ser Glu Tyr Val Ile Thr Asn Asn Pro Trp Val Arg Leu Ala Thr Val
 1155 1160 1165
 Met Leu Thr Arg Cys Thr Met Glu Asn Lys Glu Gly Leu Gly Asn Glu
 1170 1175 1180
 Val Leu Lys Met Cys Arg Ser Leu Tyr Asn Thr Lys Gln Met Leu Pro
 1185 1190 1195 1200
 Ala Glu Gly Val Lys Glu Leu Cys Leu Leu Leu Leu Asn Gln Ser Leu
 1205 1210 1215
 Leu Leu Pro Ser Leu Lys Leu Leu Leu Glu Ser Arg Asp Glu His Leu
 1220 1225 1230
 His Glu Met Ala Leu Glu Gln Ile Thr Ala Val Thr Thr Val Asn Asp
 1235 1240 1245
 Ser Asn Cys Asp Gln Glu Leu Leu Ser Leu Leu Leu Asp Ala Lys Leu
 1250 1255 1260
 Leu Val Lys Cys Val Ser Thr Pro Phe Tyr Pro Arg Ile Val Asp His
 1265 1270 1275 1280
 Leu Leu Ala Ser Leu Gln Gln Gly Arg Trp Asp Ala Glu Glu Leu Gly
 1285 1290 1295
 Arg His Leu Arg Glu Ala Gly His Glu Ala Glu Ala Gly Ser Leu Leu
 1300 1305 1310
 Leu Ala Val Arg Gly Thr His Gln Ala Phe Arg Thr Phe Ser Thr Ala
 1315 1320 1325
 Leu Arg Ala Ala Gln His Trp Val
 1330 1335

<210> 1099

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1099

acgcgtgctc tctcccgctt ggcaatcagc atggcctttt cgagctcggc ggtgcgcaat
60

tgaaccattt cttccagttg cgatttttca gaaagcagcg tcgattgacc ttcggtcagc
120

ttgcgcacat agcgtttggt gcggctggca aggatatagg cgagtatcaa tgcacctgcg
180

agggcgagga tcgaggcaat ggtcagccag aagcgcaact tgtccatggc tatgttgcg
240

gcgattagcc gacgatcttc ttaccccagg aaactgttga tggttttcct gacgtcatcc
300

atctggcca

309

<210> 1100

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1100

Met Asp Asp Val Arg Lys Thr Ile Asn Ser Phe Leu Gly Glu Glu Asp

1 5 10 15

Arg Arg Leu Ile Ala Arg Asn Ile Ala Met Asp Lys Leu Arg Phe Trp

```

      20      25      30
Leu Thr Ile Ala Ser Ile Leu Ala Leu Ala Gly Ala Leu Ile Leu Ala
      35      40      45
Tyr Ile Leu Ala Ser Arg Thr Lys Arg Tyr Val Arg Lys Leu Thr Glu
      50      55      60
Gly Gln Ser Thr Leu Leu Ser Glu Lys Ser Gln Leu Glu Glu Met Val
      65      70      75      80
Gln Leu Arg Thr Ala Glu Leu Glu Lys Ala Met Leu Ile Ala Lys Arg
      85      90      95
Glu Arg Ala Arg
      100

```

<210> 1101

<211> 540

<212> DNA

<213> Homo sapiens

<400> 1101

```

gtcgacgtta ccaactacgt catgttggag tctggtcagc cgcttcatgc ctatgatgcc
60
gacaacgtca gcgggacgat tgtggtccgt aaggcccacg aggggtgagca tctattgacc
120
ctcgacgaca ccgatcgac cctcgatcct gacgatctag tcatcgccga cgactcggga
180
gccattggcc tggctggcgt catgggtggt gcggccaccg aagtgactgc tgagacgacg
240
tcaatcatcc tcgagggcgc tcaattcgac ccgatgacgg gcgctcgtgc ttaccgacgc
300
cacaagctcg gttcggagge ctcccgcgc tttgagcggg gcgttgatcc gatttgccgc
360
cataccgcag ccgttcgcgc agcggaattg ctgcgccagt acggcgggtgc caccgtcggg
420
gagcccaccg tcgttggtga ggtcccgag atgccacgtc aaacgatcaa cgctgattta
480
cctaaccgga ttctcggcac gaaggtgcc actgaagagg tcatcgagat cttgacgcgt
540

```

<210> 1102

<211> 180

<212> PRT

<213> Homo sapiens

<400> 1102

```

Val Asp Val Thr Asn Tyr Val Met Leu Glu Ser Gly Gln Pro Leu His
1      5      10      15
Ala Tyr Asp Ala Asp Asn Val Ser Gly Thr Ile Val Val Arg Lys Ala
20      25      30
His Glu Gly Glu His Leu Leu Thr Leu Asp Asp Thr Asp Arg Thr Leu
35      40      45
Asp Pro Asp Asp Leu Val Ile Ala Asp Asp Ser Gly Ala Ile Gly Leu
50      55      60
Ala Gly Val Met Gly Gly Ala Ala Thr Glu Val Thr Ala Glu Thr Thr
65      70      75      80
Ser Ile Ile Leu Glu Gly Ala His Phe Asp Pro Met Thr Gly Ala Arg

```

```

      85      90      95
Ala Tyr Arg Arg His Lys Leu Gly Ser Glu Ala Ser Arg Arg Phe Glu
      100      105      110
Arg Gly Val Asp Pro Ile Cys Ala His Thr Ala Ala Val Arg Ala Ala
      115      120      125
Glu Leu Leu Ala Gln Tyr Gly Gly Ala Thr Val Gly Glu Pro Thr Val
      130      135      140
Val Gly Glu Val Pro Glu Met Pro Arg Gln Thr Ile Asn Ala Asp Leu
      145      150      155      160
Pro Asn Arg Ile Leu Gly Thr Lys Val Pro Thr Glu Glu Val Ile Glu
      165      170      175
Ile Leu Thr Arg
      180

```

<210> 1103

<211> 537

<212> DNA

<213> Homo sapiens

<400> 1103

```

cctttcctcc aaccaggcgc tgcggcgccg gcacttgccc gacgttataa aacaattcaa
60
cgtcaggttt accatcgctg tactcaacca aatggtagcc gtatccacct tccccaccga
120
tcgcgaccca ggtgatcttt ccctcggcat agattgacgt ggcattctcg tcggagttaa
180
tcaagcagcg cttaggcagc tgctgggccc gcggcttcgc ctagctcgcc ggagcacacg
240
aacccttccc gaagataacc gccaaaggcct ggcacacctt ctgctgcacc cattccggct
300
tgacgccgac cgccaccgca ctggtgaaca tagccgcaat aaggagaatt gcgatgtatt
360
ccggcgccgc ggcaccccga tcgtcccttg tccgcatggg tctcccctcc actacctacc
420
caatacaggg gagagcataa aaagaaacct atagccgcac ctgagcccat ggccccaaac
480
cgggggccaa gccgggcccc aaccatggga tcaaccggat gtccgtacat caccgct
537

```

<210> 1104

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1104

```

Met Tyr Gly His Pro Val Asp Pro Met Val Trp Ala Arg Leu Gly Pro
  1      5      10      15
Arg Phe Gly Ala Met Gly Ser Gly Ala Ala Met Gly Phe Phe Leu Cys
      20      25      30
Ser Pro Leu Tyr Trp Val Gly Ser Gly Gly Glu Thr His Ala Asp Lys
      35      40      45
Gly Arg Ser Gly Cys Arg Arg Ala Gly Ile His Arg Asn Ser Pro Tyr
      50      55      60
Cys Gly Tyr Val His Gln Cys Gly Gly-Gly Arg Arg Gln Ala Gly Met

```

```
<210> 1105
<211> 448
<212> DNA
<213> Homo sapiens
```

```
<210> 1106
<211> 149
<212> PRT
<213> Homo sapiens
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1034

145

<210> 1107

<211> 618

<212> DNA

<213> Homo sapiens

<400> 1107

acgcgttgat gaagtacctg ccacgcttca gcaatgacgg ctccgtgaac ggcttctata
 60
 tctttgttat cgatgagacc gaacgcaaac tcaccgaaga ggccctgccc cacctcaacg
 120
 agaacctcga agagcgcgtc gccagcgcga cacaggcgct ggctgaagcc aaccaacgcc
 180
 tggcaaaaaca aaatgttcaa acgcaagcgc gccgaagacg cgctgcgtca cgcgcagaaa
 240
 atggaagccg ggggccagct caccggcggc atcgcccatg atttcaacaa catgctgacc
 300
 gggattatcg gcagcctgga cttgatgcag cgctacatcn aggccggggc cagcgacgaa
 360
 atcgcccgnc ttactgacgc cgccgtatcg tccgcccacg gcgcggccgc cctcacccat
 420
 cggctgctgg cgttctcgcg ccgccagtcg ctggccccc gcccgctgga cccaaccag
 480
 ctggtagcgt ccctggagga tctgttccag cgaaccaaag gcgcgcatat cagctcaaa
 540
 gtgcaactgg gccgcgatat ctggcccggtg aataccgatg ccagccagtt ggaaaacgcc
 600
 ctgctcaacc tggcgatc
 618

<210> 1108

<211> 182

<212> PRT

<213> Homo sapiens

<400> 1108

Met	Arg	Pro	Asn	Ala	Asn	Ser	Pro	Lys	Arg	Pro	Cys	Ala	Thr	Ser	Thr
1			5					10						15	
Arg	Thr	Ser	Lys	Ser	Ala	Ser	Pro	Ser	Ala	His	Arg	Arg	Trp	Leu	Lys
			20					25					30		
Pro	Thr	Asn	Ala	Trp	Gln	Asn	Lys	Met	Phe	Lys	Arg	Lys	Arg	Ala	Glu
			35				40					45			
Asp	Ala	Leu	Arg	His	Ala	Gln	Lys	Met	Glu	Ala	Gly	Gly	Gln	Leu	Thr
			50				55					60			
Gly	Gly	Ile	Ala	His	Asp	Phe	Asn	Asn	Met	Leu	Thr	Gly	Ile	Ile	Gly
			65				70					75			80
Ser	Leu	Asp	Leu	Met	Gln	Arg	Tyr	Ile	Xaa	Ala	Gly	Arg	Ser	Asp	Glu
				85					90				95		
Ile	Gly	Arg	Leu	Thr	Asp	Ala	Ala	Val	Ser	Ser	Ala	His	Arg	Ala	Ala
			100					105				110			
Ala	Leu	Thr	His	Arg	Leu	Leu	Ala	Phe	Ser	Arg	Arg	Gln	Ser	Leu	Ala
			115				120					125			
Pro	Arg	Pro	Leu	Asp	Pro	Asn	Gln	Leu	Val	Ala	Ser	Leu	Glu	Asp	Leu

```

      130              135              140
Phe Gln Arg Thr Lys Gly Ala His Ile Thr Leu Lys Val Gln Leu Gly
145              150              155              160
Arg Asp Ile Trp Pro Val Asn Thr Asp Ala Ser Gln Leu Glu Asn Ala
      165              170              175
Leu Leu Asn Leu Ala Ile
      180

```

```

<210> 1109
<211> 325
<212> DNA
<213> Homo sapiens

```

```

<400> 1109
accggtgagc atcagggagg caccatgcag acgactctcc catccagtct caagccgtcc
60
agcctcaaga tcgtcgcacc gctgggggggc atcctcgtgc ccctggatca ggtgcccgat
120
cccgttttcg cccagaagat ggtggggagac gggatctccc tggaccccat ctcaaacgaa
180
ttgctggcgc cggtcgccgg caccgtgacc cagctccaca acgcccacca cgcgctcacg
240
atcacgaccc cggaaggcat cgaggttctg gtccatctcg gactggatac cgtgatgctg
300
cgcgggcgaca gctatccccc ccccn
325

```

```

<210> 1110
<211> 108
<212> PRT
<213> Homo sapiens

```

```

<400> 1110
Thr Gly Glu His Gln Gly Gly Thr Met Gln Thr Thr Leu Pro Ser Ser
1      5      10      15
Leu Lys Pro Ser Ser Leu Lys Ile Val Ala Pro Leu Gly Gly Ile Leu
      20      25      30
Val Pro Leu Asp Gln Val Pro Asp Pro Val Phe Ala Gln Lys Met Val
      35      40      45
Gly Asp Gly Ile Ser Leu Asp Pro Ile Ser Asn Glu Leu Leu Ala Pro
50      55      60
Val Ala Gly Thr Val Thr Gln Leu His Asn Ala His His Ala Leu Thr
65      70      75      80
Ile Thr Thr Pro Glu Gly Ile Glu Val Leu Val His Ile Gly Leu Asp
      85      90      95
Thr Val Met Leu Arg Gly Asp Ser Tyr Pro Pro Pro
      100      105

```

```

<210> 1111
<211> 385
<212> DNA
<213> Homo sapiens

```

```

<400> 1111

```


nnacgcgtcg ccccggtgcg cctggcagtg ggagaagagc atgaccttac cgagctcgcg
 60
 actgaactcg tcaacgccgc ctatagccgg gttgacatgg tggaacgccg tggcgaattc
 120
 gcagtacgtg gcggcatcgt cgagctcttc ccaccgggtgc tagaacaccg ggtccgtatc
 180
 gatttttttg gtgacgagat cgaggaaatg acctccttcg cggtagccga ccagcgatcc
 240
 accgacgaga ctcaccaaga actgatctgc gctccttgcc gtgagctcat cctcaccgac
 300
 gaggtacgtt cccgagccaa ggctttgctg accgaccatc ccgaattagc tgacatgttg
 360
 gagcggatcg gcaacgggtca agctt
 385

<210> 1112

<211> 128

<212> PRT

<213> Homo sapiens

<400> 1112

Xaa	Arg	Val	Ala	Pro	Val	Arg	Leu	Ala	Val	Gly	Glu	Glu	His	Asp	Leu
1				5					10					15	
Thr	Glu	Leu	Ala	Thr	Glu	Leu	Val	Asn	Ala	Ala	Tyr	Ser	Arg	Val	Asp
			20					25					30		
Met	Val	Glu	Arg	Arg	Gly	Glu	Phe	Ala	Val	Arg	Gly	Gly	Ile	Val	Asp
		35					40					45			
Val	Phe	Pro	Pro	Val	Leu	Glu	His	Pro	Val	Arg	Ile	Asp	Phe	Phe	Gly
	50					55				60					
Asp	Glu	Ile	Glu	Glu	Met	Thr	Ser	Phe	Ala	Val	Ala	Asp	Gln	Arg	Ser
65					70					75				80	
Thr	Asp	Glu	Thr	His	Gln	Glu	Leu	Ile	Cys	Ala	Pro	Cys	Arg	Glu	Leu
				85				90						95	
Ile	Leu	Thr	Asp	Glu	Val	Arg	Ser	Arg	Ala	Lys	Ala	Leu	Leu	Thr	Asp
			100					105					110		
His	Pro	Glu	Leu	Ala	Asp	Met	Leu	Glu	Arg	Ile	Gly	Asn	Gly	Gln	Ala
			115					120					125		

<210> 1113

<211> 400

<212> DNA

<213> Homo sapiens

<400> 1113

nnncgaccga tgagcgatcg cgaaccgctc aacctgggat acccctacgt cgagtctttc
 60
 cactcggact tctcggggac cggcggagtc gatcagaccg accgttctac caatatcgac
 120
 gagcacacca tcgaggagat gcatcagatc gcctcgcgtt acccggactc ccgttcggcg
 180
 ttgctgccga tcttcacct gggtcagtcg gtggacggac gcatctcgcc ggctcggtatt
 240
 gagactgcgg ctgaagtgtc cggcattacc accgcccagg tatccggggg ggcgaccttc
 300

tacaccatgt ataagaagca ccctgcgggc cagcatcaca tcggtgtctg caccacggcg
 360
 ctgtgcgccg tcatgggtgg cgaggaggtg cttgcccgtn
 400

<210> 1114
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 1114
 Xaa Arg Pro Met Ser Asp Arg Glu Pro Val Asn Leu Gly Tyr Pro Tyr
 1 5 10 15
 Val Glu Ser Phe His Ser Asp Phe Ser Gly Thr Gly Gly Val Asp Gln
 20 25 30
 Thr Asp Arg Ser Thr Asn Ile Asp Glu His Thr Ile Glu Glu Met His
 35 40 45
 Gln Ile Ala Ser Arg Tyr Pro Asp Ser Arg Ser Ala Leu Leu Pro Ile
 50 55 60
 Leu His Leu Val Gln Ser Val Asp Gly Arg Ile Ser Pro Val Gly Ile
 65 70 75 80
 Glu Thr Ala Ala Glu Val Leu Gly Ile Thr Thr Ala Gln Val Ser Gly
 85 90 95
 Val Ala Thr Phe Tyr Thr Met Tyr Lys Lys His Pro Ala Gly Gln His
 100 105 110
 His Ile Gly Val Cys Thr Thr Ala Leu Cys Ala Val Met Gly Gly Glu
 115 120 125
 Glu Val Leu Ala Arg
 130

<210> 1115
 <211> 402
 <212> DNA
 <213> Homo sapiens

<400> 1115
 tctccgactg cacagattag agaaaggact gcgatgacca ttcgcaccac tcatgttggt
 60
 tccctgcgcc gcacccccga gctgatcgag gcgaatcgtg cgcgccgtga gggttcgctc
 120
 ggcgaggttg acttcacgtc gctgctgcag gatcagggtg acggcggttg gaagcgtcag
 180
 gctgagattg gcctggatat cgtcaatgac ggcgagtacg gtcacgcgat gcttgacacg
 240
 gttgattacg gcgcgtggtg gacgtattcc atctctcggt tcggcggggt gtcctttgag
 300
 gacgtgcagc gttttgatgt gcgtcccccg gctggccgtg acggtcgcct gtctttctcg
 360
 tcgttcgctg agcgcgcga ctggcagcgt ttccggacgc gt
 402

<210> 1116
 <211> 134
 <212> PRT

<213> Homo sapiens

<400> 1116

```

Ser Pro Thr Ala Gln Ile Arg Glu Arg Thr Ala Met Thr Ile Arg Thr
 1              5              10              15
Thr His Val Gly Ser Leu Pro Arg Thr Pro Glu Leu Ile Glu Ala Asn
              20              25              30
Arg Ala Arg Arg Glu Gly Ser Leu Gly Glu Ala Asp Phe Thr Ser Leu
              35              40              45
Leu Gln Asp Gln Val Asp Gly Val Val Lys Arg Gln Ala Glu Ile Gly
              50              55              60
Leu Asp Ile Val Asn Asp Gly Glu Tyr Gly His Ala Met Leu Asp Thr
65              70              75              80
Val Asp Tyr Gly Ala Trp Trp Thr Tyr Ser Ile Ser Arg Phe Gly Gly
              85              90              95
Leu Ser Phe Glu Asp Val Gln Arg Phe Asp Val Arg Pro Pro Ala Gly
              100             105             110
Arg Asp Gly Arg Leu Ser Phe Ser Ser Phe Ala Glu Arg Arg Asp Trp
              115             120             125
Gln Arg Phe Arg Thr Arg
              130

```

<210> 1117

<211> 307

<212> DNA

<213> Homo sapiens

<400> 1117

```

ggcgccgggtc ttgccctggc tggaagtggc atgcagacct tgggtgcggaa cccgctggct
60
gacccctacc tgctaggtgt atcggctggc gcaagtgtgg gagcaaccgc agtcctcgtc
120
ttggggatgt tcacttcgtg gggaactcac cgactcactc ttgggtgccct tgtaggggcc
180
ttggcggcag ctgcattggt ctatctcatt tccatggcgc aaggaggcat gacgccgtt
240
cggttggtgc tgcggggt ggtgtgtcc tcggcgttct cgcgttggcg agtttctcg
300
tctttcg
307

```

<210> 1118

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1118

```

Gly Ala Gly Leu Ala Leu Ala Gly Ser Gly Met Gln Thr Leu Val Arg
 1              5              10              15
Asn Pro Leu Ala Asp Pro Tyr Leu Leu Gly Val Ser Ala Gly Ala Ser
              20              25              30
Val Gly Ala Thr Ala Val Ile Ala Leu Gly Met Phe Thr Ser Trp Gly
              35              40              45
Thr His Arg Leu Thr Leu Gly Ala Leu Val Gly Ala Leu Ala Ala Ala

```

```

      50              55              60
Ala Leu Val Tyr Leu Ile Ser Met Ala Gln Gly Gly Met Thr Pro Leu
65              70              75              80
Arg Leu Val Leu Ser Gly Val Val Leu Ser Ser Ala Phe Ser Arg Trp
      85              90              95
Arg Val Ser Ser Ser Phe
      100

```

<210> 1119
 <211> 353
 <212> DNA
 <213> Homo sapiens

```

<400> 1119
cgcgctccttg agatgcttga gcaggtcggt attgaggatc cagccagggt gatggattcc
60
tatccgcctc aactgtccgg tggccagcgt caacgggttc tgcttgccat ggcgttggtg
120
aactcgccgg atctgctcat ttgtgacgag ccgacgaccg ccttggaagt cacggtgcag
180
tctcaggtac tggcgactat cgatgaggtg cttgactcgg ttggtgccgc atgcctattt
240
attaccacag atttggcggg tgtctcgac atctgccggg agcttatcgt gatgacgtcg
300
ggcaaggtcg ttgaagccgg atcagcgcgt gatgtgttat ctcaccctga tca
353

```

<210> 1120
 <211> 117
 <212> PRT
 <213> Homo sapiens

```

<400> 1120
Arg Val Leu Glu Met Leu Glu Gln Val Gly Ile Glu Asp Pro Ala Arg
1      5      10      15
Val Met Asp Ser Tyr Pro His Gln Leu Ser Gly Gly Gln Arg Gln Arg
      20      25      30
Val Leu Leu Ala Met Ala Leu Val Asn Ser Pro Asp Leu Leu Ile Cys
      35      40      45
Asp Glu Pro Thr Thr Ala Leu Asp Val Thr Val Gln Ser Gln Val Leu
      50      55      60
Ala Thr Ile Asp Glu Val Leu Asp Ser Val Gly Ala Ala Cys Leu Phe
65      70      75      80
Ile Thr His Asp Leu Ala Val Val Ser His Ile Cys Arg Glu Leu Ile
      85      90      95
Val Met Thr Ser Gly Lys Val Val Glu Ala Gly Ser Ala Arg Asp Val
      100      105      110
Leu Ser His Pro Asp
      115

```

<210> 1121
 <211> 406
 <212> DNA
 <213> Homo sapiens

<400> 1121

tgatcaccca tgctccactc gaccgcgcgc tcgacgatgc gacggctgag acgatgctcg
60
cccagggcac ggtgttcac cgcaccttga cgatgatgaa aggcgtcgcc gcgaatctca
120
ccgcagcggg cggtcccggg gtgagctatg cacacgcca cgagagcacg cgcgcgatgc
180
atgccgcggg cggtccgggc ctggccggca cgcagccta catcgggtcc ttcacacggg
240
catcgccgcc atacggcgag agcatgcacg acgaagacgc ctacatcggg ctccctgaac
300
gggcaatgcc gccatacggc gagagcatgc acgacgaact cgctctgctc gtggacgccg
360
gcctgtcaac agccgaagcg ctgcgcgctg ccacctcgac gggcgc
406

<210> 1122

<211> 117

<212> PRT

<213> Homo sapiens

<400> 1122

Met	Leu	Ala	Gln	Gly	Thr	Val	Phe	Ile	Pro	Thr	Leu	Thr	Met	Met	Lys
1				5					10					15	
Gly	Val	Ala	Ala	Asn	Leu	Thr	Ala	Ala	Gly	Val	Pro	Gly	Val	Ser	Tyr
			20					25					30		
Ala	His	Ala	His	Glu	Ser	Thr	Arg	Ala	Met	His	Ala	Ala	Gly	Val	Pro
		35					40					45			
Val	Leu	Ala	Gly	Thr	Asp	Ala	Tyr	Ile	Gly	Ser	Phe	Thr	Arg	Ala	Ser
	50				55					60					
Pro	Pro	Tyr	Gly	Glu	Ser	Met	His	Asp	Glu	Asp	Ala	Tyr	Ile	Gly	Leu
65				70					75					80	
Leu	Glu	Arg	Ala	Met	Pro	Pro	Tyr	Gly	Glu	Ser	Met	His	Asp	Glu	Leu
			85					90					95		
Ala	Leu	Leu	Val	Asp	Ala	Gly	Leu	Ser	Thr	Ala	Glu	Ala	Leu	Arg	Ala
			100					105					110		
Ala	Thr	Ser	Thr	Gly											
			115												

<210> 1123

<211> 337

<212> DNA

<213> Homo sapiens

<400> 1123

gccggcgatg cggttcattaa ggcctaagat gcgcgcgacgc ctccccgctt tcctcgccct
60
cgccctccacc gcccttgccg cagcggggat ggtgggggtgc tcgtccgagg gggcatcgcc
120
aagcgaatgc tcccctgttg atattgccgc agtgccgcgag gccctgccgc attcgctcgc
180
taaggcgaag ctgcaccgc actccaccaa cgaggatgaa cactcctttt ccatgtctta
240

ccgcgcgcaa gataaggagc aggtcagctt gctggggacg aagtatgagg ccgacgggtgc
 300
 acccgctctgc cccgatgacc ccaatgaggc agcgcgc
 337

<210> 1124
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1124
 Met Arg Ser Leu Arg Pro Lys Met Arg Arg Arg Leu Pro Ala Phe Leu
 1 5 10 15
 Ala Leu Ala Ser Thr Ala Leu Ala Ala Gly Met Val Gly Cys Ser
 20 25 30
 Ser Glu Gly Ala Ser Pro Ser Glu Cys Ser Pro Val Asp Ile Ala Ala
 35 40 45
 Val Arg Glu Ala Leu Pro His Ser Leu Ala Lys Ala Lys Leu Asp Pro
 50 55 60
 His Ser Thr Asn Glu Asp Glu His Ser Phe Ser Met Leu Tyr Arg Ala
 65 70 75 80
 Gln Asp Lys Glu Gln Val Ser Leu Leu Gly Thr Lys Tyr Glu Ala Asp
 85 90 95
 Gly Ala Pro Val Cys Pro Asp Asp Pro Asn Glu Ala Ala Arg
 100 105 110

<210> 1125
 <211> 555
 <212> DNA
 <213> Homo sapiens

<400> 1125
 nncttgaatc gaatcggcat tgcgtctaaa catgacgttg agacactctc tgctaagctc
 60
 gaagagctga cggcattgct agaacgtgtc gcgcgtaaac actaaggaga catcgggatg
 120
 gctgttaaaa agactactca gaaagaaggc agctcgtgga tcggggaagt tgaaaaatat
 180
 tcccgtaaaa tctggcttgc tggtttaggc gtgtactcga aggttagcag tgacggcggc
 240
 aaatacttcg agacgttggt caaggacggc gagaaggccg agaagttgac caagagccca
 300
 gtcggtaaaa aagtagaggc ggcaaaagcg agcgcgggtt ctgcgaaatc gagcatttcg
 360
 gatacctggg gcaagttgga agagactttc gacaagcgtc tcaacagtgc tatttcgga
 420
 ttgggcgtgc ccagcaaagc ggaactgaag acgctgcaca gcaaggcga taccctgacc
 480
 aagcaaatcg aaaaactcac cggtgccaaa gtggccccgg ctaaaacggc agccgctaaa
 540
 cctgctgcca agctt
 555

<210> 1126

<211> 146
 <212> PRT
 <213> Homo sapiens

<400> 1126
 Met Ala Val Lys Lys Thr Thr Gln Lys Glu Gly Ser Ser Trp Ile Gly
 1 5 10 15
 Glu Val Glu Lys Tyr Ser Arg Lys Ile Trp Leu Ala Gly Leu Gly Val
 20 25 30
 Tyr Ser Lys Val Ser Ser Asp Gly Gly Lys Tyr Phe Glu Thr Leu Val
 35 40 45
 Lys Asp Gly Glu Lys Ala Glu Lys Leu Thr Lys Ser Pro Val Gly Lys
 50 55 60
 Lys Val Glu Ala Ala Lys Ala Ser Ala Gly Ser Ala Lys Ser Ser Ile
 65 70 75 80
 Ser Asp Thr Trp Gly Lys Leu Glu Glu Thr Phe Asp Lys Arg Leu Asn
 85 90 95
 Ser Ala Ile Ser Arg Leu Gly Val Pro Ser Lys Ala Glu Leu Lys Thr
 100 105 110
 Leu His Ser Lys Val Asp Thr Leu Thr Lys Gln Ile Glu Lys Leu Thr
 115 120 125
 Gly Ala Lys Val Ala Pro Ala Lys Thr Ala Ala Ala Lys Pro Ala Ala
 130 135 140
 Lys Leu
 145

<210> 1127
 <211> 352
 <212> DNA
 <213> Homo sapiens

<400> 1127
 cccgaccgcg tactcgtggt cgggtgccgga gtgatgggtg cagcacacgc acacgcgctc
 60
 cgcggttccc tccaggcagt cgtgtgctggc gtggtcgacc tgcaggagcg agcagcgcaa
 120
 tcactcgctt cggaagtggg cgtacccggg ttcaccgacc tgggtgaaggc gatcgagtcg
 180
 accgctccgg acgcgcgggt catcgccacg ccggactcgg ctcaccgcca accggctgag
 240
 accgccatcg acgcgggcct tgccgtcctg gtcgagaaac cgctcgccac gaccgtcgat
 300
 gacgcgaag cgatcgtgct ccgcgctgaa cgggcccggc tccgtctcat ga
 352

<210> 1128
 <211> 117
 <212> PRT
 <213> Homo sapiens

<400> 1128
 Pro Asp Arg Val Leu Val Val Gly Ala Gly Val Met Gly Ala Ala His
 1 5 10 15
 Ala His Ala Leu Arg Gly Ser Leu Gln Ala Val Val Cys Gly Val Val

```

      20      25      30
Asp Leu Gln Glu Arg Ala Ala Gln Ser Leu Ala Ser Glu Val Gly Val
      35      40      45
Pro Gly Phe Thr Asp Leu Val Lys Ala Ile Glu Ser Thr Ala Pro Asp
      50      55      60
Ala Ala Val Ile Ala Thr Pro Asp Ser Ala His Arg Gln Pro Ala Glu
      65      70      75      80
Thr Ala Ile Asp Ala Gly Leu Ala Val Leu Val Glu Lys Pro Leu Ala
      85      90      95
Thr Thr Val Asp Asp Ala Glu Ala Ile Val Leu Arg Ala Glu Arg Ala
      100      105      110
Gly Val Arg Leu Met
      115

```

<210> 1129

<211> 336

<212> DNA

<213> Homo sapiens

<400> 1129

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ntggcagccc tggaggagcc gatggtggac ctggacggcg agctgccttt cgtgcgcccc
60
ctgccccaca ttgccgtgct ccaggacgag ctgccgaac tcttcacagga tgacgacgtc
120
ggggccgatg aggaagaggc agagttgcgg gccgaacaca cgctcacaga gaagtttgtc
180
tgccctggatg actcctttgg ccatgactgc agcttgacct gtgatgactg caggaacgga
240
gggacctgcc tcttgggcct ggatggctgg gattgccccg agggctggac tgggctcatc
300
tgcaatgaga cttggtcctc gggctgcatg gatatt
336

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<210> 1130

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1130

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Xaa Ala Ala Leu Glu Glu Pro Met Val Asp Leu Asp Gly Glu Leu Pro
1      5      10      15
Phe Val Arg Pro Leu Pro His Ile Ala Val Leu Gln Asp Glu Leu Pro
      20      25      30
Gln Leu Phe Gln Asp Asp Asp Val Gly Ala Asp Glu Glu Glu Ala Glu
      35      40      45
Leu Arg Gly Glu His Thr Leu Thr Glu Lys Phe Val Cys Leu Asp Asp
      50      55      60
Ser Phe Gly His Asp Cys Ser Leu Thr Cys Asp Asp Cys Arg Asn Gly
      65      70      75      80
Gly Thr Cys Leu Leu Gly Leu Asp Gly Trp Asp Cys Pro Glu Gly Trp
      85      90      95
Thr Gly Leu Ile Cys Asn Glu Thr Trp Ser Ser Gly Cys Met Asp Ile
      100      105      110

```


<210> 1131
 <211> 672
 <212> DNA
 <213> Homo sapiens

<400> 1131
 gcgttggtgg tgctcatggc ccgggaaaat ccgctggatc aatacctctt tgagcacccc
 60
 gaattattgt tctcgtcctc ggtggaatcg actgtgttgc acccgataa cccgtatgtg
 120
 ctcggcccgc acgtggccgc ggccgcccag gaggcatacc tctcccctgc ggacgaagag
 180
 ttttacgggt cggcctttgc cgggatatgc aaaacgctga caggccagaa cgtactgcga
 240
 cgtcgcggaa atcggctgtt ctggactcgt ccggaacggg ctgtcgacgc catcgacctg
 300
 cgatcggcgg caggcaaagg gattgacatt atcgacgtgt ccaccgggag ggtcatcggg
 360
 gtagtcgacg aagccgcgcg agaccgtacc gtgcatccag gcgcggtgta cctgcatcag
 420
 ggggatcagt ggctggtcga cgaatacaac ccggtcgagc accacgccct ggtgcaccag
 480
 gacctgccgg gatattggac tcaaccgcag tcagcgtcga cggtgagaat ccttcgggag
 540
 gagagacgtc gcgcttgtgg tcccggatat gtggcgtgcg ggcaggtgga actgacagag
 600
 caagttgttg ggtatctgcg tcgcgacgaa ttcaccaatg atgtgtggta ctgcctggcc
 660
 ctcgagatgc cc
 672

<210> 1132
 <211> 224
 <212> PRT
 <213> Homo sapiens

<400> 1132
 Ala Leu Val Val Leu Met Ala Arg Glu Asn Pro Leu Asp Gln Tyr Leu
 1 5 10 15
 Phe Glu His Pro Glu Leu Leu Phe Ser Ser Ser Val Glu Ser Thr Val
 20 25 30
 Leu His Pro Asp Asn Pro Tyr Val Leu Gly Pro His Val Ala Ala Ala
 35 40 45
 Ala Gln Glu Ala Tyr Leu Ser Pro Ala Asp Glu Glu Phe Tyr Gly Ser
 50 55 60
 Ala Phe Ala Gly Ile Cys Lys Thr Leu Thr Gly Gln Asn Val Leu Arg
 65 70 75 80
 Arg Arg Gly Asn Arg Leu Phe Trp Thr Arg Pro Glu Arg Ala Val Asp
 85 90 95
 Ala Ile Asp Leu Arg Ser Ala Ala Gly Lys Gly Ile Asp Ile Ile Asp
 100 105 110
 Val Ser Thr Gly Arg Val Ile Gly Val Val Asp Glu Ala Ala Ala Asp
 115 120 125
 Arg Thr Val His Pro Gly Ala Val Tyr Leu His Gln Gly Asp Gln Trp

130	135	140
Leu Val Asp Glu Tyr Asn Pro Val Glu His His Ala Leu Val His Gln		
145	150	155
Asp Leu Pro Gly Tyr Trp Thr Gln Pro Gln Ser Ala Ser Thr Val Arg		160
	165	170
Ile Leu Arg Glu Glu Arg Arg Arg Ala Cys Gly Pro Gly Tyr Val Ala		175
	180	185
Cys Gly Gln Val Glu Leu Thr Glu Gln Val Val Gly Tyr Leu Arg Arg		190
	195	200
Asp Glu Phe Thr Asn Asp Val Trp Tyr Ser Leu Ala Leu Glu Met Pro		205
210	215	220

<210> 1133

<211> 796

<212> DNA

<213> Homo sapiens

<400> 1133

acgcgtgaag ggggggtccag cgggtgtggc actcgtatgac aagacagttt gagagcggct
60
tgtctccggg gacctggcgt aggtctcctc tgccttaacc cttggctttt gcacttcctc
120
tgtctgtcct ccatacaagc ttcttgcccc tagggaggac gggcttctta acagggggag
180
ccggttcctg tcctaaccac actggcatct tacactctgg gagatagctt cccctgaga
240
ggcgagttag ccacgtaagg ggaggtgggc gatggcttcc cttctgtctt ggggtggggg
300
agtcaggtac agtatttttt cttttaagc atcattgatc acataataag gtttgcata
360
gtccttaatc acagacctgt gaaatttgga gaattcacgg cacctaggat gggagtgage
420
ttctgattgt gagctgattt gggagctaac ctcaaggaaa ctctcttgc aagccccctg
480
ctgggtgtcg gggccttcgc caggacctc cgggggactc tggacgtctt ttgtctgcc
540
ttccttttcc ctcacctgc tccccgtga gaaagtggg ctcatgcagc tcagctcagt
600
gacagagggg ttattagggg tagctctggg acccatcttt tggtgatttc ttctctctt
660
ttctctaag gaataattgt ttctgtctac acttctttat ttctcctct ctacagctgc
720
cttctaaaaa tgtgcttttc tgttctgca gaactgaagc ttgcatggcc tttgttgta
780
ctttcccttc acgcgt
796

<210> 1134

<211> 147

<212> PRT

<213> Homo sapiens

<400> 1134

Met Gly Pro Arg Ala Thr Pro Asn Lys Pro Ser Val Thr Glu Leu Ser

```

      1           5           10           15
Cys Met Ser Pro Thr Phe Ser Arg Gly Ser Glu Val Arg Glu Lys Glu
      20           25           30
Gly Gln Thr Lys Ser Val Gln Ser Pro Arg Glu Val Pro Gly Glu Gly
      35           40           45
Pro Asp Thr Gln Gln Gly Ala Cys Lys Arg Ser Phe Leu Glu Val Ser
      50           55           60
Ser Gln Ile Ser Ser Gln Ser Glu Ala His Ser His Pro Arg Cys Arg
      65           70           75           80
Glu Phe Ser Lys Phe His Arg Ser Val Ile Lys Asp Tyr Asp Lys Pro
      85           90           95
Tyr Tyr Val Ile Asn Asp Ala Leu Lys Glu Lys Ile Leu Tyr Leu Thr
      100          105          110
Pro Pro Thr Gln Asp Arg Arg Glu Ala Ile Ala His Leu Pro Leu Arg
      115          120          125
Gly Ser Leu Ala Ser Gln Gly Glu Ala Ile Ser Gln Ser Val Arg Cys
      130          135          140
Gln Trp Gly
145

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<210> 1135

<211> 376

<212> DNA

<213> Homo sapiens

<400> 1135

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gatcaggcca cacaggacaa cttcgagaag ggctccatct tcccaccctt caccagcatc
60
agaaagatct ctgcgcacat cgctgcagcc gtggctgcaa aagcctacga gctcgggtctg
120
gcgacccgctc tgcttcccc cagcgacctg gtgaaatatg cagagaactg catgtacact
180
cccgtctacc gcaactaccg gtagtgctgc ggggatcaat tttgcagtaa taaaaaatct
240
actatcaacg cggatggtac tctgttgttt atagtcctctg ctgctaacca cccttgttgc
300
tggtgctgct ggagaggcat tgtacctgct catgcatata tgatatatat atgttgtaac
360
gttgtgaaag caaact
376

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<210> 1136

<211> 67

<212> PRT

<213> Homo sapiens

<400> 1136

```

Asp Gln Ala Thr Gln Asn Phe Glu Lys Gly Ser Ile Phe Pro Pro
      1           5           10           15
Phe Thr Ser Ile Arg Lys Ile Ser Ala His Ile Ala Ala Val Ala
      20           25           30
Ala Lys Ala Tyr Glu Leu Gly Leu Ala Thr Arg Leu Pro Pro Pro Ser
      35           40           45
Asp Leu Val Lys Tyr Ala Glu Asn Cys Met Tyr Thr Pro Val Tyr Arg

```

50
Asn Tyr Arg

55

60

65

<210> 1137

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1137

acgcgtcgct ggaacccgaa gatgaagcgc ttcattctca ccgagcgcaa cggatatctac
60

atcattgacc tgcaccagtc gctgacctac attgataagg cgtacgcctt cgtcaaggag
120

actgtcgcca agggcggcca gattcttttc gtcggcacga agaagcaggc ccaggagtcc
180

atcggtgagc agggcactcg cggtggcatg ccctatgtca accagcgttg gcttggggga
240

atgctcacta atttcagac catctcgaag cgcattgccc ggctcaagga gctcgaggcc
300

atggactttg acaaggtttc cggctccggt ctcaccaaga aggagctgct tatgctc
357

<210> 1138

<211> 119

<212> PRT

<213> Homo sapiens

<400> 1138

Thr Arg Arg Trp Asn Pro Lys Met Lys Arg Phe Ile Phe Thr Glu Arg
1 5 10 15

Asn Gly Ile Tyr Ile Ile Asp Leu His Gln Ser Leu Thr Tyr Ile Asp
20 25 30

Lys Ala Tyr Ala Phe Val Lys Glu Thr Val Ala Lys Gly Gly Gln Ile
35 40 45

Leu Phe Val Gly Thr Lys Lys Gln Ala Gln Glu Ser Ile Val Glu Gln
50 55 60

Ala Thr Arg Val Gly Met Pro Tyr Val Asn Gln Arg Trp Leu Gly Gly
65 70 75 80

Met Leu Thr Asn Phe Gln Thr Ile Ser Lys Arg Ile Ala Arg Leu Lys
85 90 95

Glu Leu Glu Ala Met Asp Phe Asp Lys Val Ser Gly Ser Gly Leu Thr
100 105 110

Lys Lys Glu Leu Leu Met Leu
115

<210> 1139

<211> 456

<212> DNA

<213> Homo sapiens

<400> 1139

gtgcacaggt cgtctgaggc catgccgagg acgatcgatc cgagtatggc ggcaccttca
60

ccaatcccgt aggaccgctc tcgtccagca tcgaccaagg cgctgttgag gcgttcggct
 120
 tcggtaatga actcgatgcg ctcaatatcc acgggggtag cgaaatcgta gatcttgccc
 180
 agactgaggc cttggaggag cgcggccgctc ggggggacgt ggcttgccgc cgggcgttcc
 240
 ttgtctctcaa ggacttcgctc gtcgcggetg acaaggaata cgtttgtgtg gtcgectgca
 300
 atgcatgctc gagcgtgggtg accatcgagg tgaaggacgg tttcggcata gaggtcatcg
 360
 tccacatcgg ccacagttag ttcgacgact cctgagtcga ctagatgacg cgccttctct
 420
 gccgcgtctt cgctgacgctc ggccaggacc gctagc
 456

<210> 1140

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1140

Met	Trp	Thr	Met	Thr	Ser	Met	Pro	Lys	Pro	Ser	Phe	Thr	Ser	Met	Val
1			5					10					15		
Thr	Thr	Leu	Glu	His	Ala	Leu	Gln	Ala	Thr	Thr	Gln	Thr	Tyr	Ser	Leu
		20					25					30			
Ser	Ala	Ala	Thr	Thr	Lys	Ser	Leu	Arg	Ala	Arg	Asn	Ala	Arg	Pro	Gln
	35						40				45				
Ala	Thr	Ser	Pro	Arg	Arg	Pro	Arg	Ser	Ser	Lys	Ala	Ser	Val	Trp	Pro
	50					55				60					
Arg	Ser	Thr	Ile	Ser	Leu	Pro	Pro	Trp	Ile	Leu	Ser	Ala	Ser	Ser	Ser
65			70					75				80			
Leu	Pro	Lys	Pro	Asn	Ala	Ser	Thr	Ala	Pro	Trp	Ser	Met	Leu	Asp	Glu
		85						90				95			
Thr	Gly	Pro	Thr	Gly	Leu	Val	Lys	Val	Pro	Pro	Tyr	Ser	Asp	Arg	Ser
		100					105					110			
Ser	Ala	Ala	Trp	Pro	Gln	Thr	Thr	Cys	Ala						
		115					120								

<210> 1141

<211> 354

<212> DNA

<213> Homo sapiens

<400> 1141

ggcgccatgc tcggcgggct ggtgctgggt gtggccgaag cctttggcgc cgatatcttc
 60
 ggcgaccagt acaaggacgt ggtggcggtt ggctgttggt ttctgggtgct gttgttccgt
 120
 ccgaccggca ttctggggccg tccggagggt gagaaagtat gagcagatat cttaaactcg
 180
 cgtttttcag cgccctgttg gtgtggggccg tggcctttcc ggtactcggc ctcaagctga
 240
 gcattgtcgg gatcaaccac gaagtgcatt gcaccgggtc cgtgaccttg accatcatcg
 300

ccctgtgctc ggtgccgatg ttctgcgcg tgctgtttac ccagcaagtc ggtg
354

<210> 1142

<211> 53

<212> PRT

<213> Homo sapiens

<400> 1142

Gly Ala Met Leu Gly Gly Leu Val Leu Gly Val Ala Glu Ala Phe Gly
1 5 10 15
Ala Asp Ile Phe Gly Asp Gln Tyr Lys Asp Val Val Ala Phe Gly Leu
20 25 30
Leu Val Leu Val Leu Leu Phe Arg Pro Thr Gly Ile Leu Gly Arg Pro
35 40 45
Glu Val Glu Lys Val
50

<210> 1143

<211> 353

<212> DNA

<213> Homo sapiens

<400> 1143

acgcgttgca catccccag gaccatcaac cgcggcattg ccgcatagac ctggagatcc
60
catgcaacgt gaaatgaagt tcgaatcgat caaggcaaag gccaaaggcga tgctcatcgg
120
cgcagccgac gacacagcaa gcgcaggcgc gaccaaccga ggggtggctca acagcgccgc
180
attcgaaatc ctggcccacg tggccgtcaa tgcccaaacac tacgcgctct ccgagagacc
240
ggcgtggag gagttcgcca agagcttcca gccgcgcaac aaccaggact acgtggccgc
300
gatcgccaag aaggccgca accacaccat gcatcccggc aggcagtcga ttt
353

<210> 1144

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1144

Met His Gly Val Val Arg Gly Leu Leu Gly Asp Arg Gly His Val Val
1 5 10 15
Leu Val Val Ala Arg Leu Glu Ala Leu Gly Glu Leu Leu Gln Arg Arg
20 25 30
Ser Leu Gly Glu Arg Val Val Leu Gly Ile Asp Gly His Val Gly Gln
35 40 45
Asp Phe Glu Cys Gly Ala Val Glu Pro Pro Ser Val Gly Arg Ala Cys
50 55 60
Ala Cys Cys Val Val Gly Cys Ala Asp Glu His Arg Leu Gly Leu Cys
65 70 75 80
Leu Asp Arg Phe Glu Leu His Phe Thr Leu His Gly Ile Ser Arg Ser

Met Arg Gln Cys Arg Gly
100

85

90

95

<210> 1145
<211> 360
<212> DNA
<213> Homo sapiens

<400> 1145
gtcttcggcg ggctcggcct gttctattgc gtcattgaccc cgggtgtactg gttctcggcc
60
catgaagtgg ccggcacctg ggtactcggg ctgtcggcgg cgatggctct gatgggtgtt
120
ttctacgtcc aggtcatcgc caagaagatc aatcctcgac cctccgacga gaaggacgcc
180
gaggtgatcg acggggctgg tccggtcggt ttcttcccgc cacagagtat ctggccgttc
240
tggtgcgcgc tcgttgctgc catcatgtgc ctccggccga tcttcggctg gtggatctct
300
ctgctcgggc tgggcattgt tatctgggcc gcctcgggtt gggcttttga gtactaccgc
360

<210> 1146
<211> 120
<212> PRT
<213> Homo sapiens

<400> 1146
Val Phe Gly Gly Leu Gly Leu Phe Tyr Cys Val Met Thr Pro Val Tyr
1 5 10 15
Trp Phe Ser Ala His Glu Val Ala Gly Thr Trp Val Leu Gly Leu Ser
20 25 30
Ala Ala Met Ala Leu Met Val Phe Phe Tyr Val Gln Val Ile Ala Lys
35 40 45
Lys Ile Asn Pro Arg Pro Ser Asp Glu Lys Asp Ala Glu Val Ile Asp
50 55 60
Gly Ala Gly Pro Val Gly Phe Phe Pro Pro Gln Ser Ile Trp Pro Phe
65 70 75 80
Trp Cys Ala Leu Val Val Ala Ile Met Cys Leu Gly Pro Ile Phe Gly
85 90 95
Trp Trp Ile Ser Leu Leu Gly Leu Gly Ile Val Ile Trp Ala Ala Ser
100 105 110
Gly Trp Ala Phe Glu Tyr Tyr Arg
115 120

<210> 1147
<211> 409
<212> DNA
<213> Homo sapiens

<400> 1147
tgtacattgg ctatgcagtc tggcctcctg aagggttatga tagtagccaa aaatatagaa
60

gccaaaaagg catccacctt cttcatcaat ccagaattga tcatgtcat gcctgtgggt
 120
 ggatcactat gtgctctcca aattgggagg ggaagtctac tctcctctct cctctctctc
 180
 ccaccttccc ctctctcttc tctcctttct attcccaggg cagtgggaaca tgatgaggtt
 240
 cttttccctt catggatata ctctttctgc cctccacata aaggggcatt gatggatctt
 300
 caagaatggg atgcctttcc ctāgaaaggc taaatattca tgaggctgaa tgtgaggatc
 360
 cagagtacac tgaaatataa ctgggtcatca gtacacatag aatctgatn
 409

<210> 1148

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1148

Met Gln Ser Gly Leu Leu Lys Val Met Ile Val Ala Lys Asn Ile Glu
 1 5 10 15
 Ala Lys Lys Ala Ser Thr Phe Phe Ile Asn Pro Glu Leu Ile Met Leu
 20 25 30
 Met Pro Val Gly Gly Ser Leu Cys Ala Leu Gln Ile Gly Arg Gly Ser
 35 40 45
 Leu Leu Ser Ser Leu Leu Ser Leu Pro Pro Ser Pro Leu Ser Ser Leu
 50 55 60
 Leu Ser Ile Pro Arg Ala Val Glu His Asp Glu Val Leu Phe Pro Ser
 65 70 75 80
 Trp Ile Ser Ser Phe Cys Pro Pro His Lys Gly Ala Leu Met Asp Leu
 85 90 95
 Gln Glu Trp Asp Ala Phe Pro
 100

<210> 1149

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1149

gtcgacttct gcatggaaaa acgcgatctg gtgattgagc acgttgcgga gatgtacggc
 60
 cgtgaggcgg tatcgcagat cattaccttc ggtaccatgg cggcgaaagc gggtattcgt
 120
 gacgtgggcc gtgtactggg tcacccgtat ggcttcgtcg atcgcattct caagctgggt
 180
 ccgcccgatc cgggcatgac gctggaaaaa gcctttgccg ccgaaccgca gttgccggaa
 240
 atctacgagg ccgatgagga agtcaaagcg ctgatcgaca tggcgcgcaa gctgggaagg
 300
 gtgacgagg
 309

<210> 1150

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1150

```

Val Asp Phe Cys Met Glu Lys Arg Asp Leu Val Ile Glu His Val Ala
 1           5           10           15
Glu Met Tyr Gly Arg Glu Ala Val Ser Gln Ile Ile Thr Phe Gly Thr
      20           25           30
Met Ala Ala Lys Ala Val Ile Arg Asp Val Gly Arg Val Leu Gly His
      35           40           45
Pro Tyr Gly Phe Val Asp Arg Ile Ser Lys Leu Val Pro Pro Asp Pro
      50           55           60
Gly Met Thr Leu Glu Lys Ala Phe Ala Ala Glu Pro Gln Leu Pro Glu
65           70           75           80
Ile Tyr Glu Ala Asp Glu Glu Val Lys Ala Leu Ile Asp Met Ala Arg
      85           90           95
Lys Leu Gly Arg Val Thr Arg
      100

```

<210> 1151

<211> 360

<212> DNA

<213> Homo sapiens

<400> 1151

```

gcgcgcattt tttgcaaccc aagcgacgtc attatggccg agtcgcgggc ttatgtcggg
60
gcgctcaata ccttcgcctc gtaccaaact gaggtcattc acgtcgacat ggacgacagc
120
gggttggttc cggaatccct gcgtgagaaa gtgactgcag cgcgtcaaga cggcaagtcg
180
gtgaagttcc ttacacggt tcttaactac tcgaaccgt cggaatctc gcaatccacc
240
gagcgtcgcc gggagatcct agcggtggt gacgagctgg atctgttggt ggttgaggac
300
aaccgtagc ggttactcaa cctcgatggt gatccactgc cgacgttgaa gtcgatggat
360

```

<210> 1152

<211> 120

<212> PRT

<213> Homo sapiens

<400> 1152

```

Ala Arg Ile Phe Cys Asn Pro Ser Asp Val Ile Met Ala Glu Ser Pro
 1           5           10           15
Ala Tyr Val Gly Ala Leu Asn Thr Phe Ala Ser Tyr Gln Thr Glu Val
      20           25           30
Ile His Val Asp Met Asp Asp Ser Gly Leu Val Pro Glu Ser Leu Arg
      35           40           45
Glu Lys Val Thr Ala Ala Arg Gln Asp Gly Lys Ser Val Lys Phe Leu
      50           55           60
Tyr Thr Val Pro Asn Tyr Ser Asn Pro Ser Gly Ile Ser Gln Ser Thr

```


<210> 1155
 <211> 339
 <212> DNA
 <213> Homo sapiens

<400> 1155
 ctttaagttat tttggtcttt gcctctctcc tcaggttggtg aagattacag aaatctggga
 60
 tggcttatgg gacgcttctc agccctaagt aggaaaacag cagtgaaaat ggcaacccaa
 120
 acatcacgca ggactggggg ttttggggaa acagctcact ttagagcagt gcagtgtaga
 180
 gctttccgtc ttctaccagg gtccaccttt aacactgttt atctgaaaat tttccccctg
 240
 gcttactcgc ttgcagctgc ccactttgca gaaagatggc gctctgatct ctacgctccc
 300
 tgttccttca gggactccat agtatttttt ttcacgcgt
 339

<210> 1156
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 1156
 Met Gly Arg Phe Ser Ala Leu Ser Arg Lys Thr Ala Val Lys Met Ala
 1 5 10 15
 Thr Lys Thr Ser Arg Arg Thr Gly Gly Phe Gly Glu Thr Ala His Phe
 20 25 30
 Arg Ala Val Gln Cys Arg Ala Phe Arg Leu Leu Pro Gly Ser Thr Phe
 35 40 45
 Asn Thr Val Tyr Leu Lys Ile Phe Pro Leu Ala Tyr Ser Leu Ala Ala
 50 55 60
 Ala His Phe Ala Glu Arg Trp Arg Ser Asp Leu Tyr Ala Pro Cys Ser
 65 70 75 80
 Phe Arg Asp Ser Ile Val Phe Phe Phe Thr Arg
 85 90

<210> 1157
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 1157
 nnacagcctc tctccgaccc ggcggcgggt gcacacgtcc ccgtctgagg agtattcgtg
 60
 ctggcaaaac tcgtgacccg acacctgagg gcctatcggt tgcacgttgc cgtcatcatc
 120
 gttatgcagg tttgcgcccc aatcgcgggc ctgaccttgc caaccatcaa cgcagacatc
 180
 atcaacaagg gcgtcgtgac agcggatacc ggatatgtca ccaccactc cctcttcatg
 240
 ctggcggtcg ctttagggca ggccatctgc caggtcattg cggtttatct cgccgctcag
 300

gtggcgatgg gaatgggccc tgacgttcgc gacgccatct tcacccgcac ccttgacttc
 360
 tcggcccggg agatcaacaa attcggagca ccatcactca ttacccggac taccaacgac
 420
 gtccag
 426

<210> 1158
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 1158
 Val Leu Ala Lys Leu Val Thr Arg His Leu Arg Ala Tyr Arg Leu His
 1 5 10 15
 Val Ala Val Ile Ile Val Met Gln Val Cys Ala Gln Ile Ala Ala Leu
 20 25 30
 Thr Leu Pro Thr Ile Asn Ala Asp Ile Ile Asn Lys Gly Val Val Thr
 35 40 45
 Ala Asp Thr Gly Tyr Val Thr Thr His Ser Leu Phe Met Leu Ala Val
 50 55 60
 Ala Leu Gly Gln Ala Ile Cys Gln Val Ile Ala Val Tyr Leu Ala Ala
 65 70 75 80
 Gln Val Ala Met Gly Met Gly Arg Asp Val Arg Asp Ala Ile Phe Thr
 85 90 95
 Arg Thr Leu Asp Phe Ser Ala Arg Glu Ile Asn Lys Phe Gly Ala Pro
 100 105 110
 Ser Leu Ile Thr Arg Thr Thr Asn Asp Val Gln
 115 120

<210> 1159
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 1159
 tctctccgac cgcgcctggg gcccggtggg gtctctcggg gacgcgggag aggcggggcg
 60
 ggacgaggca ggagcaggcc gggctctcgc catgggtcac tgtcgctct gccacgggaa
 120
 gttttcctcg agaagcctgc gcagcatctc cgagagggcg cctggagcga gcatggagag
 180
 gccatccgca gaggagcgcg tgctcgtacg ggacttccag cgctgcttg gtgtggctgt
 240
 ccgccaggac cccaccttgt ctccgtttgt ctgcaagagc tgccacgccc agttctacca
 300
 gtgccacagc cttctcaagt ctttctgca gagggtcaac gcctccccgg ctggtcgccc
 360
 gaagccttgt gcaaaggctg gtgcccagcc cccaacaggg gcagaggagg gagcgtgtct
 420
 ggtggatctg atca
 434

<210> 1160

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1160

```

Met Gly His Cys Arg Leu Cys His Gly Lys Phe Ser Ser Arg Ser Leu
 1           5           10           15
Arg Ser Ile Ser Glu Arg Ala Pro Gly Ala Ser Met Glu Arg Pro Ser
          20           25           30
Ala Glu Glu Arg Val Leu Val Arg Asp Phe Gln Arg Leu Leu Gly Val
          35           40           45
Ala Val Arg Gln Asp Pro Thr Leu Ser Pro Phe Val Cys Lys Ser Cys
          50           55           60
His Ala Gln Phe Tyr Gln Cys His Ser Leu Leu Lys Ser Phe Leu Gln
65           70           75           80
Arg Val Asn Ala Ser Pro Ala Gly Arg Arg Lys Pro Cys Ala Lys Val
          85           90           95
Gly Ala Gln Pro Pro Thr Gly Ala Glu Glu Gly Ala Cys Leu Val Asp
          100          105          110
Leu Ile

```

<210> 1161

<211> 355

<212> DNA

<213> Homo sapiens

<400> 1161

```

ctgcacacac accaggccac gcccacgagg acggccagtc agcatgcagc caatacaccc
60
acagagggat ggggagcagc cctcagtgcc agctccaaca ggcccactgc aggtcctgtc
120
actgcaccca aggagctgcc ttccatttca cctgacattt ccactaaggc cccagcgttt
180
atcattccag aagagcagca ggcagaacct tcacctcca agagctgcaa gtgcgctgtg
240
gcaggaaaag aagatctggc gtctgaagtc agctcctgct ctccaggaaa agagggacga
300
tgacatagga cttgagcaaa atgagagccc cgtgatggga gagaacacct gatca
355

```

<210> 1162

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1162

```

Met Gln Pro Ile His Pro Gln Arg Asp Gly Glu Gln Pro Ser Val Pro
 1           5           10           15
Ala Pro Thr Gly Pro Leu Gln Val Leu Ser Leu His Pro Arg Ser Cys
          20           25           30
Leu Pro Phe His Leu Thr Phe Pro Leu Arg Ala Gln Arg Leu Ser Phe
          35           40           45
Gln Lys Ser Ser Arg Gln Asn Leu His Leu Pro Arg Ala Ala Ser Ala

```

```

      50              55              60
Leu Trp Gln Glu Lys Lys Ile Trp Arg Leu Lys Ser Ala Pro Ala Leu
65              70              75              80
Gln Glu Lys Arg Asp Asp Ile Gly Leu Glu Gln Asn Glu Ser Pro
      85              90              95
Val Met Gly Glu Asn Thr
      100

```

<210> 1163

<211> 466

<212> DNA

<213> Homo sapiens

<400> 1163

```

ngcgcgccag gaagcgggag gtcagctgta caccaggggt aatagaactt ctaccctcag
60
aggagtcaaa gagaaggcag aactatggca ggaaagctcc ggaagtecca catccctgga
120
gtgagcatct ggcagctggt ggaggagatc cctgaaggct gcagcacgcc ggactttgag
180
cagaagcccc tcacctcggc tctgccagag gggaaaaatg ctgtctttcg ggctgtggtc
240
tgtgggggagc ccaggccccga ggtgcgttgg cagaactcca aaggtgacct cagtgattcc
300
agcaagtaca agatctcctc cagccctggc agcaaggagc acgtgctgca gatcaacaag
360
ctgacaggcg aggacacgga tctgtaccac tgcacagcag taaatgcgta cggagaggcc
420
gcttgctcag tgagactcac cgtcatcgaa gttggctttc ggaaga
466

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<210> 1164

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1164

```

Met Ala Gly Lys Leu Arg Lys Ser His Ile Pro Gly Val Ser Ile Trp
1              5              10              15
Gln Leu Val Glu Glu Ile Pro Glu Gly Cys Ser Thr Pro Asp Phe Glu
      20              25              30
Gln Lys Pro Val Thr Ser Ala Leu Pro Glu Gly Lys Asn Ala Val Phe
      35              40              45
Arg Ala Val Val Cys Gly Glu Pro Arg Pro Glu Val Arg Trp Gln Asn
      50              55              60
Ser Lys Gly Asp Leu Ser Asp Ser Ser Lys Tyr Lys Ile Ser Ser Ser
65              70              75              80
Pro Gly Ser Lys Glu His Val Leu Gln Ile Asn Lys Leu Thr Gly Glu
      85              90              95
Asp Thr Asp Leu Tyr His Cys Thr Ala Val Asn Ala Tyr Gly Glu Ala
      100              105              110
Ala Cys Ser Val Arg Leu Thr Val Ile Glu Val Gly Phe Arg Lys
      115              120              125

```

<210> 1165
 <211> 414
 <212> DNA
 <213> Homo sapiens

<400> 1165
 tgggtggttc cggacacana aaatcacgtg ttgaaccgaa tttcaggcat ggtgaaaggc
 60
 tgcttttagta aagtccttgt tgagccgctg ctgctcaagc tcaacttgac nattatgtgt
 120
 ctgcacattc tgctgatgtc cacgttcgtg gccctgcccg gtcagttggc tgcagcagga
 180
 ttccccgcgc ctgaacactg gaaagtgtat ctggtgacga tgctcatctc cttcgtctcc
 240
 gttgtccctt tcattatcta tgcagaagtg aaacgcccga tgaagcgcgt attcctgacg
 300
 tgtgttgccg tgctgttgat tgccgaaatc gtactatggg gtcccgggcc acacttctgg
 360
 gaactggtca tggcggtaca gcttttcttc ctgccttta atctcatgga agcc
 414

<210> 1166
 <211> 138
 <212> PRT
 <213> Homo sapiens

<400> 1166
 Trp Val Val Pro Asp Thr Xaa Asn His Val Leu Asn Arg Ile Ser Gly
 1 5 10 15
 Met Val Lys Gly Cys Phe Ser Lys Val Leu Val Glu Pro Arg Leu Leu
 20 25 30
 Lys Leu Asn Leu Thr Ile Met Cys Leu His Ile Leu Leu Met Ser Thr
 35 40 45
 Phe Val Ala Leu Pro Gly Gln Leu Ala Ala Ala Gly Phe Pro Ala Ala
 50 55 60
 Glu His Trp Lys Val Tyr Leu Val Thr Met Leu Ile Ser Phe Val Ser
 65 70 75 80
 Val Val Pro Phe Ile Ile Tyr Ala Glu Val Lys Arg Arg Met Lys Arg
 85 90 95
 Val Phe Leu Thr Cys Val Ala Leu Leu Ile Ala Glu Ile Val Leu
 100 105 110
 Trp Gly Ser Gly Pro His Phe Trp Glu Leu Val Ile Gly Val Gln Leu
 115 120 125
 Phe Phe Leu Ala Phe Asn Leu Met Glu Ala
 130 135

<210> 1167
 <211> 464
 <212> DNA
 <213> Homo sapiens

<400> 1167
 gtcgaccccg tgggcaagag tcgcggcccc tgacgataac ttcaccccg cgcccttgag
 60

ctgttgggac cggctggcta aggcctgggc accggtagcg gcctgggtgga taccctcatg
 120
 tagccgggtg acctgcctga ccatcttcgg caaaccagtg cgcagttgtg tgggtgaactc
 180
 attgaccctt cgagacagtc gtgaggaacc gtcagcaagt tcgtcgatgc cgtcgtcgat
 240
 gctcttgcca gagttcggat ccttgatcgc catcgcttg acggccaccc ccgaccagc
 300
 ccgcacgccc agggcgtagc catcggtcat cgcgtcgcgg acgatgggta ccaggtcgtg
 360
 gcattcctgc gcggtgtggc ttgcacgca tcgacgcagg aagtcagcct cgtcccgga
 420
 cagggttcc ttactaagtt ccgcggtttt ctttcccac gcgt
 464

<210> 1168

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1168

Met	Thr	Asp	Gly	Tyr	Ala	Leu	Gly	Val	Arg	Ala	Gly	Ser	Gly	Val	Ala
1				5					10					15	
Val	Lys	Ala	Met	Ala	Ile	Lys	Asp	Pro	Asn	Ser	Gly	Lys	Ser	Ile	Asp
		20						25					30		
Asp	Gly	Ile	Asp	Glu	Leu	Ala	Asp	Gly	Ser	Ser	Arg	Leu	Ser	Arg	Gly
		35						40					45		
Val	Asn	Glu	Phe	Thr	Thr	Gln	Leu	Arg	Thr	Gly	Leu	Pro	Lys	Met	Val
		50				55					60				
Arg	Gln	Val	Thr	Arg	Leu	His	Glu	Gly	Ile	His	Gln	Ala	Ala	Thr	Gly
65					70					75				80	
Ala	Gln	Ala	Leu	Ala	Ser	Arg	Ser	Gln	Gln	Leu	Lys	Ala	Gly	Gly	Val
			85					90						95	
Lys	Leu	Ser	Ser	Gly	Ala	Ala	Thr	Leu	Ala	His	Gly	Val	Asp		
			100					105					110		

<210> 1169

<211> 486

<212> DNA

<213> Homo sapiens

<400> 1169

nacgcgtgaa gggagcagaa cggacaccag ttactagtgg ctctggtcgg ggacagcctc
 60
 ctagagcctt tctggccaat gggaacagga atagcccggg gctttctagc tgctatggac
 120
 tctgcctgga tgggtccgaag ttggtctcta ggaacgagcc ctttggaagt gctggcagag
 180
 agggaaagta ttacaggtt gctgcctcag accaccctg agaatgtgag taagaacttc
 240
 agccagtaca gtatcgaccc tgtcactcgg tatcccaata tcaacgtcaa cttcctccgg
 300
 ccaagccagg tgcgccattt atatgatact ggcgaaacaa aagatattca cctggaaatg
 360

gagagcctgg tgaattcccg aaccaccccc aaattgactc gcaatgagtc tgtagctcgt
 420
 tcaagcaaac tgctgggttg gtgccagagg cagacagatg gctatgcagg ggtaaactg
 480
 acagat
 486

<210> 1170
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 1170
 Arg Glu Gln Asn Gly His Gln Leu Leu Val Ala Leu Val Gly Asp Ser
 1 5 10 15
 Leu Leu Glu Pro Phe Trp Pro Met Gly Thr Gly Ile Ala Arg Gly Phe
 20 25 30
 Leu Ala Ala Met Asp Ser Ala Trp Met Val Arg Ser Trp Ser Leu Gly
 35 40 45
 Thr Ser Pro Leu Glu Val Leu Ala Glu Arg Glu Ser Ile Tyr Arg Leu
 50 55 60
 Leu Pro Gln Thr Thr Pro Glu Asn Val Ser Lys Asn Phe Ser Gln Tyr
 65 70 75 80
 Ser Ile Asp Pro Val Thr Arg Tyr Pro Asn Ile Asn Val Asn Phe Leu
 85 90 95
 Arg Pro Ser Gln Val Arg His Leu Tyr Asp Thr Gly Glu Thr Lys Asp
 100 105 110
 Ile His Leu Glu Met Glu Ser Leu Val Asn Ser Arg Thr Thr Pro Lys
 115 120 125
 Leu Thr Arg Asn Glu Ser Val Ala Arg Ser Ser Lys Leu Leu Gly Trp
 130 135 140
 Cys Gln Arg Gln Thr Asp Gly Tyr Ala Gly Val Asn Val Thr Asp
 145 150 155

<210> 1171
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 1171
 acgcgttcaa caaagcacag aaccggagat gcagtgggag ccgagagcag gaagcgcgga
 60
 ggcagcgcca ggtgctggcg ctgcccaggg ccccgtagca agtggggccc atagcagccg
 120
 actcgctaga ccctcccaaa acgcacacca cgcgcgacca ggaccgagag gcccgcacgg
 180
 ccctgctagg ccacaaacac tccactgtct ccagggtaaa agacaaacac agcctcgctt
 240
 gtccctccaa gagtacaacc tctgtctgat gaaaaacaaa cgaccagag aggaggcagc
 300
 tgccgggaca ctgcaggctg ggcccggcgc gcccttgag ggaggtcaa aatcccgga
 360
 caggcacagt gttcaggctg attgactgtc ccaggccagg gcggcctcaa ctgccagagc
 420

acctcctac
429

<210> 1172
<211> 118
<212> PRT
<213> Homo sapiens

<400> 1172
Met Gln Trp Glu Pro Arg Ala Gly Ser Ala Glu Ala Ala Pro Gly Ala
1 5 10 15
Gly Ala Ala Arg Gly Pro Val Pro Ser Gly Ala His Ser Ser Arg Leu
20 25 30
Ala Arg Pro Ser Gln Asn Ala His His Ala Arg Pro Gly Pro Arg Gly
35 40 45
Pro His Gly Pro Ala Arg Pro Gln Thr Leu His Cys Leu Gln Gly Lys
50 55 60
Arg Gln Thr Gln Pro Arg Leu Ser Leu Gln Glu Tyr Asn Leu Cys Leu
65 70 75 80
Met Lys Asn Lys Arg Pro Arg Glu Glu Ala Ala Gly Thr Leu Gln
85 90 95
Ala Gly Pro Ala Ala Pro Leu Glu Gly Arg Ser Lys Ser Arg Asn Arg
100 105 110
His Ser Val Gln Ala Asp
115

<210> 1173
<211> 435
<212> DNA
<213> Homo sapiens

<400> 1173
cgcggtcaatg acgacggcga gcattctgcc gagcaggtga tgcgagccac ccgcggtgct
60
ggacttggggg ccgaggccaa gcgtcgcatc atcttgggta cctatgcctt gtcggctggg
120
tactatgacg cctactacgg ctcggtctcag aaagtccgta ccctcatcca acgcgacttc
180
gagaaagcat ggcagatgtg cgatgtgtc gtgtcaccgg ccacgccaac gactgccttc
240
cggctgggtg agcgtactgc tgaccgatg gcgatgtacc gctccgatct atgcacggtc
300
ccggccaata tggccggaag tcccgagga tctttcccga tcggtctatc agagaccgac
360
ggcatgcccg tcggcatgca ggtgatggcg ccaatcatgg cggacgatcg aatctaccga
420
gttggggccg ctcta
435

<210> 1174
<211> 145
<212> PRT
<213> Homo sapiens

<400> 1174

Arg Val Asn Asp Asp Gly Glu His Ser Ala Glu Gln Val Met Arg Ala
 1 5 10 15
 Thr Arg Gly Ala Gly Leu Gly Ala Glu Ala Lys Arg Arg Ile Ile Leu
 20 25 30
 Gly Thr Tyr Ala Leu Ser Ala Gly Tyr Tyr Asp Ala Tyr Tyr Gly Ser
 35 40 45
 Ala Gln Lys Val Arg Thr Leu Ile Gln Arg Asp Phe Glu Lys Ala Trp
 50 55 60
 Gln Met Cys Asp Val Leu Val Ser Pro Ala Thr Pro Thr Thr Ala Phe
 65 70 75 80
 Arg Leu Gly Glu Arg Thr Ala Asp Pro Met Ala Met Tyr Arg Ser Asp
 85 90 95
 Leu Cys Thr Val Pro Ala Asn Met Ala Gly Ser Pro Ala Gly Ser Phe
 100 105 110
 Pro Ile Gly Leu Ser Glu Thr Asp Gly Met Pro Val Gly Met Gln Val
 115 120 125
 Met Ala Pro Ile Met Ala Asp Asp Arg Ile Tyr Arg Val Gly Ala Ala
 130 135 140
 Leu
 145

<210> 1175

<211> 729

<212> DNA

<213> Homo sapiens

<400> 1175

gatcgactg caatccaccc acatctactt gatatgaaaa ttggtcaagg caaatatgag
 60
 caggggttct ttccaaagtt acagtccgat gtcttggcaa caggaccaac cagtaacaat
 120
 cgctgggtaa gtcggagtgc cactgcacag cgcaggaaag gacgccttcg ccagcattct
 180
 gagcatgttg ggctggacaa cgacttgagg gagaaatata tgcaagaggc acgaagtta
 240
 ggaaaaaacc tgaggcaacc caaactgtca gacctctctc ctgcagttat tgcacagacc
 300
 aactgtaaat tcgtagaagg cttattaaaa gaatgtagaa ataagacaaa gcgcatgttg
 360
 gtggagaaga tgggacatga agcgggtggaa cttggccatg gagaagcaaa catcaccggc
 420
 ctggaggaga acaccttgat cgccagcctt tgtgacctgc tggagaggat atggagccat
 480
 ggcttgacagg tcaagcaggg gaagtcggtt ttgtggtcac atttaattcc ttttcaggac
 540
 agagaagaga accaagagcc cttgacagaa tcaccagttg ccctcggacc agaaagaaaa
 600
 aaatctgact caggagttat gttgccaacg ctcagggtct ctcttattca ggacatgagg
 660
 catattcaaa acatgagtga gatcaagact gatgttggac gagctcgggc gtggataaga
 720
 ctgtctcta
 729

<210> 1176
 <211> 243
 <212> PRT
 <213> Homo sapiens

<400> 1176
 Asp Arg Thr Ala Ile His Pro His Leu Leu Asp Met Lys Ile Gly Gln
 1 5 10 15
 Gly Lys Tyr Glu Gln Gly Phe Phe Pro Lys Leu Gln Ser Asp Val Leu
 20 25 30
 Ala Thr Gly Pro Thr Ser Asn Asn Arg Trp Val Ser Arg Ser Ala Thr
 35 40 45
 Ala Gln Arg Arg Lys Gly Arg Leu Arg Gln His Ser Glu His Val Gly
 50 55 60
 Leu Asp Asn Asp Leu Arg Glu Lys Tyr Met Gln Glu Ala Arg Ser Leu
 65 70 75 80
 Gly Lys Asn Leu Arg Gln Pro Lys Leu Ser Asp Leu Ser Pro Ala Val
 85 90 95
 Ile Ala Gln Thr Asn Cys Lys Phe Val Glu Gly Leu Leu Lys Glu Cys
 100 105 110
 Arg Asn Lys Thr Lys Arg Met Leu Val Glu Lys Met Gly His Glu Ala
 115 120 125
 Val Glu Leu Gly His Gly Glu Ala Asn Ile Thr Gly Leu Glu Glu Asn
 130 135 140
 Thr Leu Ile Ala Ser Leu Cys Asp Leu Leu Glu Arg Ile Trp Ser His
 145 150 155 160
 Gly Leu Gln Val Lys Gln Gly Lys Ser Val Leu Trp Ser His Leu Ile
 165 170 175
 Pro Phe Gln Asp Arg Glu Glu Asn Gln Glu Pro Leu Ala Glu Ser Pro
 180 185 190
 Val Ala Leu Gly Pro Glu Arg Lys Lys Ser Asp Ser Gly Val Met Leu
 195 200 205
 Pro Thr Leu Arg Val Ser Leu Ile Gln Asp Met Arg His Ile Gln Asn
 210 215 220
 Met Ser Glu Ile Lys Thr Asp Val Gly Arg Ala Arg Ala Trp Ile Arg
 225 230 235 240
 Leu Ser Leu

<210> 1177
 <211> 581
 <212> DNA
 <213> Homo sapiens

<400> 1177
 acgcgtgatg agttgcgcga gaccagcaac tgcagccgaa tacagttttc ttgtgtaccc
 60
 cgtcgcacag ctgcgagagg tgggcattgc cgagtgaggc aacgatgtct aaggcggaaa
 120
 gctcatcctc ggcagacggg aagactttgt cgtcggggat gttgtcaatg agagcgggga
 180
 cgtcgatctc ggtactgccc atggcgatcat gaaggatcgc gcgatacggg ggcacgaccc
 240

cgatgagggc gtcgtcgaat ccagcgatga tcgatacctc tctcggtagc acgtccgtgg
 300
 ccaacagggtg gtcgacttgg gcgggggcta gccatgtaat tgttccgagc acatggaggg
 360
 tggctgccag gaggcggatg gccggttctg gggcatcttt ggagatcttc agccggacat
 420
 cagtgggcag tccggccggg acttggcaga gggcctgggc gggatgggag cgctgggcga
 480
 cgacgaaacg ccccgacgcc gtaacgccgt gggcttggag atcgcaggtc cacttctctg
 540
 ggctttcacc ggcagagatc atggtgtgga ccaccattgt g
 581

<210> 1178
 <211> 192
 <212> PRT
 <213> Homo sapiens

<400> 1178
 Met Val Val His Thr Met Ile Ser Ala Gly Glu Ser Pro Glu Lys Trp
 1 5 10 15
 Thr Cys Asp Leu Gln Ala His Gly Val Thr Ala Ser Gly Arg Phe Val
 20 25 30
 Val Ala Gln Arg Ser His Pro Ala Gln Ala Leu Cys Gln Val Pro Ala
 35 40 45
 Gly Leu Pro Thr Asp Val Arg Leu Lys Ile Ser Lys Asp Ala Pro Glu
 50 55 60
 Pro Ala Ile Arg Leu Leu Ala Ala Thr Leu His Val Leu Gly Thr Ile
 65 70 75 80
 Thr Trp Leu Ala Pro Ala Gln Val Asp His Leu Leu Ala Thr Asp Val
 85 90 95
 Leu Pro Arg Glu Val Ser Ile Ile Ala Gly Phe Asp Asp Ala Leu Ile
 100 105 110
 Gly Val Val Ala Pro Tyr Arg Ala Ile Leu His Asp Ala Met Gly Ser
 115 120 125
 Thr Glu Ile Asp Val Pro Ala Leu Ile Asp Asn Ile Pro Asp Asp Lys
 130 135 140
 Val Phe Pro Ser Ala Glu Asp Glu Leu Ser Ala Leu Asp Ile Val Ala
 145 150 155 160
 Ser Leu Gly Asn Ala His Leu Ser Gln Leu Cys Asp Gly Val His Lys
 165 170 175
 Lys Thr Val Phe Gly Cys Ser Cys Trp Ser Arg Ala Thr His His Ala
 180 185 190

<210> 1179
 <211> 597
 <212> DNA
 <213> Homo sapiens

<400> 1179
 gtgcactttc tggcttctaa ctgtggcccc agccctgact ccttgagggtg ctctgtgct
 60
 gattggggct tctggacatg ctgccacaag atgtctggaa actccagggg gcacctggcc
 120

agaccctgcc ctgggaacgg ccggaagaat cccaaaacat gagattccgg tgcagctgag
 180
 ccccgccaat tcattgtctc ttccagtcctc ttctgaaggc tgcatttggc aatgtgaccc
 240
 tcgggggtggg gaaggcatca gaggaatata ggctatggga cgccagaggc agcgctcctgg
 300
 ggacaaagcc cactttcttc catgcccagg gcttctctcat ggaccagca tgggtggacgt
 360
 ggccctcaga cgtccatggg tgggtggggga ggcacgtgct gtttgccct gtctctgctc
 420
 agagtctcat aggaagatgc atggtccaca caacagttag tcggcaggga gtccaggctt
 480
 cccctcccaa ccagtgggtg tgagacgctt ggtttataac ccaagatccc ttgtccatt
 540
 ggtgcctcct gaatctccca cctcccgagg cacctgcatg gcctctacct gacgcgt
 597

<210> 1180

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1180

Met	Gly	Arg	Gln	Arg	Gln	Arg	Pro	Gly	Asp	Lys	Ala	His	Phe	Phe	Pro
1			5					10					15		
Cys	Pro	Gly	Leu	Pro	His	Gly	Pro	Ser	Met	Val	Asp	Val	Ala	Leu	Arg
		20					25				30				
Arg	Pro	Trp	Val	Val	Gly	Glu	Ala	Arg	Ala	Val	Trp	Pro	Cys	Leu	Cys
		35				40				45					
Ser	Glu	Ser	His	Arg	Lys	Met	His	Gly	Pro	His	Asn	Ser	Glu	Ser	Ala
	50				55				60						
Gly	Ser	Pro	Gly	Phe	Pro	Ser	Gln	Pro	Val	Val	Leu	Arg	Arg	Leu	Val
65			70					75						80	
Tyr	Asn	Pro	Arg	Ser	Leu	Val	Pro	Leu	Val	Pro	Pro	Glu	Ser	Pro	Thr
		85				90								95	
Ser	Arg	Gly	Thr	Cys	Met	Ala	Ser	Thr							
		100					105								

<210> 1181

<211> 352

<212> DNA

<213> Homo sapiens

<400> 1181

gtcgactacc tcgatgtttc cccgcgtcag atggtctccg tggctactgc catgattccg
 60
 ttccctcgagc acgacgacgc taaccgtgcc ctgatgggtg cgaacatgca gcgtcaggct
 120
 gtgcgcgtgc tgcgttcgga ggctccgttc gtcggtaccg gstatggagca gcgtgctgct
 180
 tacgacgccg gcgatgtcat tgctgcttcg gccacagggtg tggctgagac cgtgtcggca
 240
 ggcttcatca ccatcatgga cgatgagggc cagcgccaca cctacctgct gcgcaagttc
 300

gagcgacacca accagggcac ctgctacaac cagaagccac tgttgacgag gg
352

<210> 1182

<211> 117

<212> PRT

<213> Homo sapiens

<400> 1182

Val	Asp	Tyr	Leu	Asp	Val	Ser	Pro	Arg	Gln	Met	Val	Ser	Val	Ala	Thr
1				5					10					15	
Ala	Met	Ile	Pro	Phe	Leu	Glu	His	Asp	Asp	Ala	Asn	Arg	Ala	Leu	Met
			20					25					30		
Gly	Ala	Asn	Met	Gln	Arg	Gln	Ala	Val	Pro	Leu	Leu	Arg	Ser	Glu	Ala
		35					40					45			
Pro	Phe	Val	Gly	Thr	Gly	Met	Glu	Gln	Arg	Ala	Ala	Tyr	Asp	Ala	Gly
	50					55					60				
Asp	Val	Ile	Val	Ala	Ser	Ala	Thr	Gly	Val	Val	Glu	Thr	Val	Ser	Ala
65					70					75				80	
Gly	Phe	Ile	Thr	Ile	Met	Asp	Asp	Glu	Gly	Gln	Arg	His	Thr	Tyr	Leu
				85				90						95	
Leu	Arg	Lys	Phe	Glu	Arg	Thr	Asn	Gln	Gly	Thr	Cys	Tyr	Asn	Gln	Lys
			100					105						110	
Pro	Leu	Leu	Thr	Arg											
															115

<210> 1183

<211> 432

<212> DNA

<213> Homo sapiens

<400> 1183

gaccccttctg ggcgctgggc caagcgctg gtgaggccgt cctctcctgc agaaccgccg
60
cctcttcgcc cctgccgct cacctgttct gtctgtctca cctctccag gaagcctgcc
120
tgcccttctc catgctgatg ggcgtggccc ttgtccctgc agccatgcat tgacctcctg
180
ggctcctgga ggccaggcca cgtcctcatc cctctgggt gagtgagagg cacagcctgg
240
gtgcgtgggg ccgtggcggc tccgagcgcc caccgctgtg tcctctcatg agtgggtgcc
300
gtccaggtct gtcctgggct ggctgcgagg aggaggttg cctcgcgagg ccatgtgcgt
360
gacagtggag acatcgccag cctctgctt gcacagctga cggcagcccc tctctctcca
420
gcatgtccc ca
432

<210> 1184

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1184
 Met Ala Gly Glu Arg Gly Ala Ala Val Ser Cys Ala Ser Arg Arg Leu
 1 5 10 15
 Ala Met Ser Pro Leu Ser Arg Thr Trp Pro Arg Glu Ala Asn Leu Leu
 20 25 30
 Leu Ala Ala Ser Pro Gly Gln Thr Trp Thr Ala Pro Thr His Glu Arg
 35 40 45
 Thr Gln Arg Trp Arg Leu Gly Ala Ala Thr Ala Pro Arg Thr Gln Ala
 50 55 60
 Val Pro Leu Thr His Pro Glu Gly Met Arg Thr Trp Pro Gly Leu Gln
 65 70 75 80
 Glu Pro Arg Arg Ser Met His Gly Cys Arg Asp Lys Gly His Ala His
 85 90 95
 Gln His Gly Glu Gly Gln Ala Gly Phe Leu Glu Glu Val Ser Arg Thr
 100 105 110
 Glu Gln Val Ser Gly Gln Gly Arg Arg Gly Ser Ala Gly Glu
 115 120 125
 Asp Gly Leu Thr Thr Arg Leu Asp Gln Arg Pro Glu Gly
 130 135 140

<210> 1185
 <211> 423
 <212> DNA
 <213> Homo sapiens

<400> 1185
 accggtgaat ttggccttaa cagcgatgga actcctggcc catcttatga acctggcatg
 60
 gaattacgcg gcaaatatgt attgttggtt gaaggtgtac ggggctctct atctaaacaa
 120
 gtcatcaata aataccaatt atccgagggt catgaaccac aaaagttcgg ccttggctta
 180
 aaagaaattt gggaaataga cccagaaaaa cacaagaag gcagagtcag tcataccatg
 240
 ggctggccat taaatggcaa tgctggcggc ggttctttta tttatcatgc agaaaacaat
 300
 caagtcttta tcggctttgt ggtgcatctt aattacgcca acccttacct atccccctac
 360
 caagaatttc aacgctttta acaccatccg attatcgagg agctattaac tggcggtaaa
 420
 cgc
 423

<210> 1186
 <211> 141
 <212> PRT
 <213> Homo sapiens

<400> 1186
 Thr Gly Glu Phe Gly Leu Asn Ser Asp Gly Thr Pro Gly Pro Ser Tyr
 1 5 10 15
 Glu Pro Gly Met Glu Leu Arg Gly Lys Tyr Val Leu Leu Gly Glu Gly
 20 25 30
 Val Arg Gly Ser Leu Ser Lys Gln Val Ile Asn Lys Tyr Gln Leu Ser


```

      35          40          45
Glu Gly His Glu Pro Gln Lys Phe Gly Leu Gly Leu Lys Glu Ile Trp
 50          55          60
Glu Ile Asp Pro Glu Lys His Lys Glu Gly Arg Val Ser His Thr Met
 65          70          75          80
Gly Trp Pro Leu Asn Gly Asn Ala Gly Gly Gly Ser Phe Ile Tyr His
      85          90          95
Ala Glu Asn Asn Gln Val Phe Ile Gly Phe Val Val His Leu Asn Tyr
      100          105          110
Ala Asn Pro Tyr Leu Ser Pro Tyr Gln Glu Phe Gln Arg Phe Lys His
      115          120          125
His Pro Ile Ile Ala Glu Leu Leu Thr Gly Gly Lys Arg
      130          135          140

```

<210> 1187

<211> 387

<212> DNA

<213> Homo sapiens

<400> 1187

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acgcgtgctg gtgagtttaa attgaatgct gatggtaatt tggtagcgaa ttcaggggct
60
aaggtccagg gctataatgc aatagatggc atagtcggtg ggaacttaga agatatggta
120
gtaccactg ctcgaatttc tcctcaagca acatcaagtg ttgatttaaa agtgaatctt
180
aattccgaag gtgaggatgt gccgccttat attcgagcgg actttgatcc agccaatcca
240
gatacttatg actatactca gacccaaacg gttgcggatg ggagtggtaa taatcattta
300
attagttatt actatgctaa aagtgatgta gcaaatacct atcaggttta tgccacggta
360
gatgggaagt cgactgatga taccggt
387

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<210> 1188

<211> 129

<212> PRT

<213> Homo sapiens

<400> 1188

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Thr Arg Ala Gly Glu Phe Lys Leu Asn Ala Asp Gly Asn Leu Val Thr
 1          5          10          15
Asn Ser Gly Ala Lys Val Gln Gly Tyr Asn Ala Ile Asp Gly Ile Val
      20          25          30
Gly Gly Asn Leu Glu Asp Met Val Val Pro Thr Ala Arg Ile Ser Pro
      35          40          45
Gln Ala Thr Ser Ser Val Asp Leu Lys Val Asn Leu Asn Ser Glu Gly
      50          55          60
Glu Asp Val Pro Pro Tyr Ile Arg Ala Asp Phe Asp Pro Ala Asn Pro
      65          70          75          80
Asp Thr Tyr Asp Tyr Thr Gln Thr Gln Thr Val Ala Asp Gly Ser Gly
      85          90          95
Asn Asn His Leu Ile Ser Tyr Tyr Tyr Ala Lys Ser Asp Val Ala Asn

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100 105 110
 Thr Tyr Gln Val Tyr Ala Thr Val Asp Gly Lys Ser Thr Asp Asp Thr
 115 120 125
 Gly

<210> 1189
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1189
 tcgatcgccg accgcccggg ccttgccccc ggcatgatcg gtggcctggt ggccagcacc
 60
 ctgggtgctg gtttcattgg cggcatcggt gcaggttttc tggccgggta cagcgccaag
 120
 gccattgccc gctgggcacg gctgcccagc agcctggatg cgctcaaacc gattctgac
 180
 atttcgctgc tggccagcct gttcactggg ttggtgatga tctacgtggt cggccagccg
 240
 gtggcggcca tgctcggagg cctgacacac tttctcgaca gcatgggtac caccaacgcc
 300
 attctcctgg gcntgttgct cggcggctag
 330

<210> 1190
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 1190
 Ser Ile Ala Asp Arg Pro Gly Leu Ala Pro Gly Met Ile Gly Gly Leu
 1 5 10 15
 Leu Ala Ser Thr Leu Gly Ala Gly Phe Ile Gly Gly Ile Val Ala Gly
 20 25 30
 Phe Leu Ala Gly Tyr Ser Ala Lys Ala Ile Ala Arg Trp Ala Arg Leu
 35 40 45
 Pro Ser Ser Leu Asp Ala Leu Lys Pro Ile Leu Ile Ile Ser Leu Leu
 50 55 60
 Ala Ser Leu Phe Thr Gly Leu Val Met Ile Tyr Val Val Gly Gln Pro
 65 70 75 80
 Val Ala Ala Met Leu Gly Gly Leu Thr His Phe Leu Asp Ser Met Gly
 85 90 95
 Thr Thr Asn Ala Ile Leu Leu Gly Xaa Leu Leu Gly Gly
 100 105

<210> 1191
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 1191
 cggccgacga tgtgcgggta gcaagagatt tggagagcca tgatgacgtc agcagacaaa
 60

gcagggacta acggacagac catgcagaca ccgccggtgg tgtcgccgca ggactgggag
120
gcagcccgtc agcaactgct cgtgaaggaa aaggcgcata cccgtgcccg cgacgcactc
180
gccgccgaac ggaggcgcat gccgtggatg gaagtgacaa aaacctacgc attcgaggcg
240
ccctcgggca aggccagtct gctcgatctg ttccagggcc ggaagcagct gatcctgtac
300
cgggccttct tcgagccggg cgtgttcggc tggccccgacc atgcctgccg c
351

<210> 1192

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1192

Met	Cys	Gly	Glu	Gln	Glu	Ile	Trp	Arg	Ala	Met	Met	Thr	Ser	Ala	Asp
1			5					10					15		
Lys	Ala	Gly	Thr	Asn	Gly	Gln	Thr	Met	Gln	Thr	Pro	Pro	Val	Val	Ser
			20					25					30		
Pro	Gln	Asp	Trp	Glu	Ala	Ala	Arg	Gln	Gln	Leu	Leu	Val	Lys	Glu	Lys
		35					40					45			
Ala	His	Thr	Arg	Ala	Arg	Asp	Ala	Leu	Ala	Ala	Glu	Arg	Arg	Arg	Met
	50					55				60					
Pro	Trp	Met	Glu	Val	Thr	Lys	Thr	Tyr	Ala	Phe	Glu	Ala	Pro	Ser	Gly
65				70					75					80	
Lys	Ala	Ser	Leu	Leu	Asp	Leu	Phe	Gln	Gly	Arg	Lys	Gln	Leu	Ile	Leu
			85					90					95		
Tyr	Arg	Ala	Phe	Glu	Pro	Gly	Val	Phe	Gly	Trp	Pro	Asp	His	Ala	
		100					105					110			
Cys	Arg														

<210> 1193

<211> 722

<212> DNA

<213> Homo sapiens

<400> 1193

ggatcccagc ctccagatcc catcttgtag ctcttctttc tctacactna ggttgctccc
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cgacttagga cgcccagttt gtactcagtg tttgctcttt tatggcagag cctctgcaat
120
cccagcctcc tggccccttc tgtacatgat ttctcttggt gccactccat gcatttttct
180
tggctcagga cttagtgggc ctccatggga cttggtacct ctacttggtc cttctctggaa
240
tctgtaactt tgtgttcccc accattcttt cttttatgaa ccgatggtgc aacagcatga
300
ctacctgaaa ttcttagtca ctcccagctg ctttagtgga gggaaaatgc ccacagcaca
360
ggaaatagtc ctgcccttcg agagaggcca ggggatggga gcgtgtccag agaagggcga
420

tgggttgatg aaggggtggcc acagcgcccc ggaggaaggg gccagaacgc tctctgttct
 480
 gttccatgag gaggattatg ttggtgtgtg tagtccccctg gttcagagtt gtccagaaat
 540
 agctcagtgt aaggaacaat ttcccaaaga tcaaaagagc tgtctcaaga tagcagtgcg
 600
 ttcccagccc ctacaggtgt atacagcaca aagggaggga ccccttagtg tggctgtcac
 660
 agaggggaagt ggacgtcctg tggtttgacc ccaccagatg gctttagaga tctgggcccc
 720
 ag
 722

<210> 1194
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 1194
 Met Val Gln Gln His Asp Tyr Leu Lys Phe Leu Val Thr Pro Ser Cys
 1 5 10 15
 Phe Ser Gly Gly Lys Met Pro Thr Ala Gln Glu Ile Val Leu Pro Phe
 20 25 30
 Glu Arg Gly Gln Gly Met Gly Ala Cys Pro Glu Lys Gly Asp Gly Leu
 35 40 45
 Met Lys Gly Gly His Ser Ala Arg Glu Glu Gly Ala Arg Thr Leu Ser
 50 55 60
 Val Leu Phe His Glu Glu Asp Tyr Val Gly Val Cys Ser Pro Leu Val
 65 70 75 80
 Gln Ser Cys Pro Glu Ile Ala Gln Cys Lys Glu Gln Phe Ser Lys Asp
 85 90 95
 Gln Lys Ser Cys Leu Lys Ile Ala Val Arg Ser Gln Pro Leu Gln Val
 100 105 110
 Tyr Thr Ala Gln Arg Glu Gly Pro Pro Ser Val Ala Val Thr Glu Gly
 115 120 125
 Ser Gly Arg Pro Val Val
 130

<210> 1195
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 1195
 tctagagcat gatattccgc gggcgcgccc ggggtggactt tggttcgaga gtggaactaa
 60
 gtgagtaatg ggggcgggcg ggccagacgc gctcccagcc tccctggcgag agtgcgtgcc
 120
 ggtttccccg gggcacggga gtgtgtctag gaggggaggc caggatcctt cctcgagtcc
 180
 tgtcctgaac aaaagaaaac gaggtgggtg gtgcttgaac ggccctgttt actctgcaga
 240
 tagccgaact ggtaggactc cggcgcgccc tatttatctt gattggctct gcctgaaggc
 300

aagcgtaa cccgtccaac ctgtatcact gcgaagagct cggtcgggag cgctttttgg
 360
 aaatgcagat tcttagcccc caccagatc t
 391

<210> 1196
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 1196
 Met Gly Ala Ala Arg Pro Asp Ala Leu Pro Ala Ser Trp Arg Glu Cys
 1 5 10 15
 Cys Pro Val Ser Arg Gly His Gly Ser Val Ser Arg Arg Gly Gly Gln
 20 25 30
 Asp Pro Ser Ser Ser Pro Val Leu Asn Lys Arg Lys Arg Gly Gly Trp
 35 40 45
 Cys Leu Asn Gly Pro Val Tyr Ser Ala Asp Ser Arg Thr Gly Arg Thr
 50 55 60
 Pro Ala Arg Pro Ile Tyr Leu Asp Trp Leu Cys Leu Lys Ala Ser Val
 65 70 75 80
 Asn Pro Val Gln Pro Val Ser Leu Arg Arg Ala Arg Ser Gly Ala Leu
 85 90 95
 Phe Gly Asn Ala Asp Ser
 100

<210> 1197
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 1197
 acgcgtgatg atcatgaaaa tggtagacag cgtctagcag aagtcgcctc tgtgatgggc
 60
 tggcagcaag atgaaatcat cgtaaactga caaggggatg aaccctttct gcctgttgca
 120
 cttattcatg ccacgggtta agcgtagacc gatgatgctg aatctgaaat ggccacgatt
 180
 gcctgtgcga ttgataacgt agcagagctg ttttaaccaa atgtagttaa agtcgtttgt
 240
 gatgaaaaac agcgcgcctt gtatttcagt cgtgcgccta tgccatggga ccgtaatggt
 300
 tttatggaaa aaacagacga tcaagcgta ccagcggatt ttctgcgtt gcgtcatatt
 360
 ggtcggtatg tttaccgcac gacatn
 386

<210> 1198
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 1198
 Thr Arg Asp Asp His Glu Asn Gly Thr Glu Arg Leu Ala Glu Val Ala

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      1             5             10             15
Ser Val Met Gly Trp Gln Gln Asp Glu Ile Ile Val Asn Val Gln Gly
      20             25             30
Asp Glu Pro Phe Leu Pro Val Ala Leu Ile His Ala Thr Val Lys Ala
      35             40             45
Leu Ala Asp Asp Ala Glu Ser Glu Met Ala Thr Ile Ala Cys Ala Ile
      50             55             60
Asp Asn Val Ala Glu Leu Phe Asn Pro Asn Val Val Lys Val Val Cys
      65             70             75             80
Asp Glu Lys Gln Arg Ala Leu Tyr Phe Ser Arg Ala Pro Met Pro Trp
      85             90             95
Asp Arg Asn Gly Phe Met Glu Lys Thr Asp Asp Gln Ala Leu Pro Ala
      100            105            110
Asp Phe Pro Ala Leu Arg His Ile Gly Pro Tyr Val Tyr Arg Thr Thr
      115            120            125

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<210> 1199

<211> 318

<212> DNA

<213> Homo sapiens

<400> 1199

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acgcgttcag cgtcatgtac agccccgggc cgtcaattt gatgggcctc aatgccgggc
60
ttacgggcaa attgcgtcgc tccagcggtt tctacatcgg cgtgggggtgc gcgatgctgc
120
tgatggtcgg gctggttggg ctcaccggcg aagcgatcat ctcccaggcg gcgctgccgt
180
atatttcttt gattggcggg gtgtacacgc tgtacctcgc ctaccagggtg ttcaccgcac
240
gtaccgaagt ggatgacgcc ccaagcgcg ctgccaagac cttgaccttc tggaatggcc
300
tggatgatcca gttgctcc
318

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<210> 1200

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1200

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Met Tyr Ser Pro Gly Pro Val Asn Leu Met Gly Leu Asn Ala Gly Leu
1             5             10             15
Thr Gly Lys Leu Arg Arg Ser Ser Gly Phe Tyr Ile Gly Val Gly Cys
      20             25             30
Ala Met Leu Leu Met Val Gly Leu Val Gly Leu Thr Gly Glu Ala Ile
      35             40             45
Ile Ser Gln Ala Ala Leu Pro Tyr Ile Ser Leu Ile Gly Gly Val Tyr
      50             55             60
Thr Leu Tyr Leu Ala Tyr Gln Val Phe Thr Ala Arg Thr Glu Val Asp
      65             70             75             80
Asp Ala Pro Ser Ala Pro Ala Lys Thr Leu Thr Phe Trp Asn Gly Leu
      85             90             95
Val Ile Gln Leu Leu

```

100

<210> 1201
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 1201
 gtcgacgcac aactccagct ggctgctccc aacagcccga acatccccct ttatcgcat
 60
 atgatacctca ccgtgctgcg catggccaag gatgaccgca accgttggaa tgcaaaaatc
 120
 acgctgcagg cgatccgcga gctggataac gccttccgcg tgctggaaca gttcaagggc
 180
 cgccgcaagg tcacggtggt tggctcggcg cgcacgcgg tcgaaagccc gctgtacgcc
 240
 ttggcaaggg aagtcggcac gctgctggcg caatccgacc tgatggtgat caccggcggt
 300
 ggcgggcgga tcatggcgcg tgcccacgag ggcgcaaggt ctggaacaca gcctgggggt
 360

<210> 1202
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 1202
 Val Asp Ala Gln Leu Gln Leu Val Ala Pro Asn Ser Pro Asn Ile Pro
 1 5 10 15
 Leu Tyr Arg Asp Met Ile Leu Thr Val Leu Arg Met Ala Lys Asp Asp
 20 25 30
 Arg Asn Arg Trp Asn Ala Lys Ile Thr Leu Gln Ala Ile Arg Glu Leu
 35 40 45
 Asp Asn Ala Phe Arg Val Leu Glu Gln Phe Lys Gly Arg Arg Lys Val
 50 55 60
 Thr Val Phe Gly Ser Ala Arg Thr Pro Val Glu Ser Pro Leu Tyr Ala
 65 70 75 80
 Leu Ala Arg Glu Val Gly Thr Leu Leu Ala Gln Ser Asp Leu Met Val
 85 90 95
 Ile Thr Gly Gly Gly Gly Ile Met Ala Ala Ala His Glu Gly Ala
 100 105 110
 Arg Ser Gly Thr Gln Pro Gly Gly
 115 120

<210> 1203
 <211> 477
 <212> DNA
 <213> Homo sapiens

<400> 1203
 ccggatatgg cagctcgact tcattcgacc agagttcttg gaacatttgg ctatcatgca
 60
 cctgagtatg caatgactgg acaacttagc tctaagagtg acgtttacag ttttggagtt
 120

ggtcttcttg agctcctgac tggaagaaag cctgtggatc ttccattacc aagaggacag
 180
 caaagtcttg tgacatgggc aactccacgg ctttgtgaag ataaagttag gcaatgcgtt
 240
 gattcaagac ttggagtaga atatcctcct aaatccggtg caaagtttgc agctgttgct
 300
 gcactgtgtg tgcaatatga agctgacttt cgaccaaca tgagcatcgt ggtgaaggcg
 360
 cttcagcccc tgctgaatgc acgtgcatcc aacaaccctg gatgaatgaa tgaatgactg
 420
 ccgttgcttt tcctgacga gagtatctga atcagacaat catgtagcat tgaattc
 477

<210> 1204

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1204

Pro	Asp	Met	Ala	Ala	Arg	Leu	His	Ser	Thr	Arg	Val	Leu	Gly	Thr	Phe
1				5					10					15	
Gly	Tyr	His	Ala	Pro	Glu	Tyr	Ala	Met	Thr	Gly	Gln	Leu	Ser	Ser	Lys
		20						25				30			
Ser	Asp	Val	Tyr	Ser	Phe	Gly	Val	Gly	Leu	Leu	Glu	Leu	Leu	Thr	Gly
		35				40					45				
Arg	Lys	Pro	Val	Asp	Leu	Pro	Leu	Pro	Arg	Gly	Gln	Gln	Ser	Leu	Val
	50				55					60					
Thr	Trp	Ala	Thr	Pro	Arg	Leu	Cys	Glu	Asp	Lys	Val	Arg	Gln	Cys	Val
65				70					75					80	
Asp	Ser	Arg	Leu	Gly	Val	Glu	Tyr	Pro	Pro	Lys	Ser	Val	Ala	Lys	Phe
			85					90						95	
Ala	Ala	Val	Ala	Ala	Leu	Cys	Val	Gln	Tyr	Glu	Ala	Asp	Phe	Arg	Pro
		100						105					110		
Asn	Met	Ser	Ile	Val	Val	Lys	Ala	Leu	Gln	Pro	Leu	Leu	Asn	Ala	Arg
		115					120						125		
Ala	Ser	Asn	Asn	Pro	Gly										
			130												

<210> 1205

<211> 407

<212> DNA

<213> Homo sapiens

<400> 1205

acgcgttgcc attgaagact ggcaattaca cgatttacac atcattgatg ctgcagttga
 60
 tgtgcacagg gaaacactag ctaccgtgca gcaggaaatg atgggagaaa tcagccatgg
 120
 taacaagaac caagccatcc tggacacaga cggccggggt tgtgcgaacg gaacgttagt
 180
 ctatcaatgt gttgcggaac gattcaaggg atgctggccc ccccatcac ttgccaatc
 240
 aagatgtgga gggaatctgt ctgcgcagaa cctggatctc gtggtgttac gacgttgtcc
 300

ccttctcgct cggacgccgc tcatgctccg ccacgtcgct gagcgagtga caaggtatcc
 360
 tgggaccatg cgtatggttt caactgaagc gctggcgaat cgtaaan
 407

<210> 1206
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1206
 Met Met Gly Glu Ile Ser His Gly Asn Lys Asn Gln Ala Ile Leu Asp
 1 5 10 15
 Thr Asp Gly Arg Gly Cys Ala Asn Gly Thr Leu Val Tyr Gln Cys Val
 20 25 30
 Ala Glu Arg Phe Lys Gly Cys Trp Pro Pro Pro Ser Leu Ala Gln Ser
 35 40 45
 Arg Cys Gly Gly Asn Leu Ser Ala Gln Asn Leu Asp Leu Val Val Val
 50 55 60
 Arg Arg Cys Pro Leu Leu Ala Arg Thr Pro Leu Met Leu Arg His Val
 65 70 75 80
 Ala Glu Arg Val Thr Arg Tyr Pro Gly Thr Met Arg Met Val Ser Thr
 85 90 95
 Glu Ala Leu Ala Asn Arg Lys
 100

<210> 1207
 <211> 292
 <212> DNA
 <213> Homo sapiens

<400> 1207
 gctagcatgt cacttttttc ttcagtagat ggcaactggag agacattgca ggatgaagag
 60
 gcttgccctc attcctatgt gctttcccggt ccttgcttct ccagccatgt gtgggacaac
 120
 caggggtgct caccacctag tgagtttcag ggacactcca catgtcccag caagtcttat
 180
 cagcatctta gctggcttct caacaagact cagtggcacc cctgtggatg tctcccatca
 240
 agtttcatta gtgccccagg gggagactcc cagaaagttt cagcagcacc ac
 292

<210> 1208
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 1208
 Met Ser Leu Phe Ser Ser Val Asp Gly Thr Gly Glu Thr Leu Gln Asp
 1 5 10 15
 Glu Glu Ala Cys Leu His Ser Tyr Val Leu Ser Arg Pro Cys Phe Ser
 20 25 30
 Ser His Val Trp Asp Asn Gln Gly Cys Ser Pro Pro Ser Glu Phe Gln

35	40	45
Gly His Ser Thr Cys Pro Ser Lys Ser Tyr Gln His Leu Ser Trp Leu		
50	55	60
Leu Asn Lys Thr Gln Trp His Pro Cys Gly Cys Leu Pro Ser Ser Phe		
65	70	75
Ile Ser Ala Pro Gly Gly Asp Ser Gln Lys Val Ser Ala Ala Pro		
85	90	95

<210> 1209

<211> 431

<212> DNA

<213> Homo sapiens

<400> 1209

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ttggttccta taatggcggg agcttacatt tttgctggta tcattatattt gttaatgcat
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gccagtgaag ttattccggc aatatcaact attgtcgagt atgcctttac gccagcttct
120
gcgcaggggtg gttttgctgg tgcaacggta tggatggcga ttcgttttgg tgttgcccgt
180
ggtgtatttt caaatgagggc aggttttaggt tcggcgccga tcgctcatgc cagtgcacaa
240
actaatgaac cggttcgcca aggggttggtg gcgatgtag gtactttcct tgatacactt
300
attatttgta caggttttagt gattgttatt tctggtgctt ggacagaagg attgtcgggt
360
gctgcggtta catctgctgc atttaactcg gcgttacctg gttggggggg atacttagtc
420
gctatcagct g
431

```

<210> 1210

<211> 143

<212> PRT

<213> Homo sapiens

<400> 1210

Leu Val Pro Ile Met Ala Val Ala Tyr Ile Phe Ala Gly Ile Ile Ile		
1	5	10
Leu Leu Met His Ala Ser Glu Val Ile Pro Ala Ile Ser Thr Ile Val		
20	25	30
Glu Tyr Ala Phe Thr Pro Ala Ser Ala Gln Gly Gly Phe Ala Gly Ala		
35	40	45
Thr Val Trp Met Ala Ile Arg Phe Gly Val Ala Arg Gly Val Phe Ser		
50	55	60
Asn Glu Ala Gly Leu Gly Ser Ala Pro Ile Ala His Ala Ser Ala Gln		
65	70	75
Thr Asn Glu Pro Val Arg Gln Gly Leu Val Ala Met Leu Gly Thr Phe		
85	90	95
Leu Asp Thr Leu Ile Ile Cys Thr Gly Leu Val Ile Val Ile Ser Gly		
100	105	110
Ala Trp Thr Glu Gly Leu Ser Gly Ala Ala Leu Thr Ser Ala Ala Phe		
115	120	125
Asn Leu Ala Leu Pro Gly Trp Gly Gly Tyr Leu Val Ala Ile Ser		

130

135

140

<210> 1211

<211> 480

<212> DNA

<213> Homo sapiens

<400> 1211

gaggagggac gagaggctgg tgagatggag tccagcacc tgcaggagag cccagggcc
60

agagccgaag ctgtgcttct ccatgagatg gatgaagatg atctggccaa tgccctgac
120

tgccctgaga ttcaacagga gctgaaaatc attgaatctg aggaggagct ctcactgttg
180

ccacctctg ctctgaagac cagcccaatt cagcctattc tcgagtcgag tctggggccc
240

tttattccct cagagcctcc tgggagcttg ccttgtggct ccttcctgc tccagtctcc
300

acccctctgg aggtgtggac tagggatcca gccaatcaga gcacacaggg ggcttccaca
360

gcagccagca gagagaagcc ggaacctgag cagggcctgc acccagacct cgccagcctg
420

gtcctctgga aaatagttcc ttttgagaag gcattctcag aggtggagt gtgctcgca
480

<210> 1212

<211> 160

<212> PRT

<213> Homo sapiens

<400> 1212

Glu Glu Gly Arg Glu Ala Gly Glu Met Glu Ser Ser Thr Leu Gln Glu
1 5 10 15

Ser Pro Arg Ala Arg Ala Glu Ala Val Leu Leu His Glu Met Asp Glu
20 25 30

Asp Asp Leu Ala Asn Ala Leu Ile Trp Pro Glu Ile Gln Gln Glu Leu
35 40 45

Lys Ile Ile Glu Ser Glu Glu Glu Leu Ser Ser Leu Pro Pro Pro Ala
50 55 60

Leu Lys Thr Ser Pro Ile Gln Pro Ile Leu Glu Ser Ser Leu Gly Pro
65 70 75 80

Phe Ile Pro Ser Glu Pro Pro Gly Ser Leu Pro Cys Gly Ser Phe Pro
85 90 95

Ala Pro Val Ser Thr Pro Leu Glu Val Trp Thr Arg Asp Pro Ala Asn
100 105 110

Gln Ser Thr Gln Gly Ala Ser Thr Ala Ala Ser Arg Glu Lys Pro Glu
115 120 125

Pro Glu Gln Gly Leu His Pro Asp Leu Ala Ser Leu Ala Pro Leu Glu
130 135 140

Ile Val Pro Phe Glu Lys Ala Ser Pro Glu Ala Gly Val Cys Ser Arg
145 150 155 160

<210> 1213

<211> 1141

<212> DNA

<213> Homo sapiens

<400> 1213

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nntcatgatg gcggcctggt gtgtgggtat gtccacgatg ggcgcgtcac gcgtgtcgcc
60
cgtgatgctc aggggagggt taccgggata gaggggccat cagggcgttg gagttacggc
120
tacaacgagg ctgggtcact catcagcgcg acggggcccc gcacacaaca taactggact
180
cacgagcct atggccggct caccagccac gccacatccg gaaccgacac caccttcgcc
240
tgggaccagg aaggccacct ggcgagacg tgtacgcgtg cacacgggca tgccactgcc
300
accagtatc gctatgacgc agcgggacgg cgcgtcagtg cgaccagctc agacggccag
360
gaggagcgtt actcctggga tggacgggggt tggtgtctg acatcaccac cgacgccacg
420
accgtatcga ctcacgtcga tgcattgggg cgcgccagtc gtatcaccac taagggccag
480
caggtacgag tggactggga cctcgtgacc ggagccccc cctcgattga tggtcgtcct
540
gtgcttcccc tgcccggagg acgcctctc ggcgccacac ccatcggcga taccaaccta
600
tggcgtgagg tcatgcccac cgaccctgac aacccttacc agcccgccac ggccactatt
660
gagggtgtcc ccgagacgat caggatggcc gggaacacgc tagtggttga tggtcaccct
720
tggtgggggc gcgcctctac gacccaacta ccaccacctt cttgtctcct gacccgtaa
780
ccccgcccgc cggcgcgcta tgggccaaca acccctacga ctacgccaac aacaaccccc
840
tcacctcac cgatcctctc gggaccacc ccgtcaccga cgaccaactg gcactcctca
900
ccaccccat cggcacactc gcacactacg tcgccaactc cgtcagcaca ctcgtgcac
960
acatcaccga tccgatcagc cactggtggg ccaccacaaa agaccggatc ctctcccggy
1020
acttctgat cggtgccggc ctcgtcatcg gcggtatcgc gtagcggcca cgggcgtagg
1080
aggacccctc ctagecggcg ccatttcggg gggactcacc tcaggcgggt tttccgctag
1140
c
1141

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<210> 1214

<211> 259

<212> PRT

<213> Homo sapiens

<400> 1214

```

Xaa His Asp Gly Gly Leu Val Cys Gly Tyr Val His Asp Gly Arg Val
1           5           10           15
Thr Arg Val Ala Arg Asp Ala Gln Gly Arg Val Thr Gly Ile Glu Gly

```

```
<210> 1215
<211> 317
<212> DNA
<213> Homo sapiens
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<210> 1216
<211> 102
<212> PRT
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<213> Homo sapiens

<400> 1216

```

Met Tyr Cys Gly Glu Pro Thr Leu Phe Ser Thr Met Asn Ala Ser Thr
 1           5           10           15
Arg Pro Arg Asp Ser Asp Gly Ser Ser Pro Pro Lys Val Val Pro Arg
           20           25           30
Tyr Phe Phe His Ala Pro Thr Pro Ala Thr Ala Arg Thr Pro Pro Pro
           35           40           45
Arg Ser Gly Val Leu Pro Val Met Ala Gly Leu Thr Pro Gly Ala Val
           50           55           60
Pro Ile Lys Gly Lys Gln Val Gly Ile Pro Pro Asp Ala Gly Cys Arg
65           70           75           80
His Ala His Val Val His Pro Gln Val Asp Arg Ala His Arg Arg Leu
           85           90           95
Asp Leu Gln Arg Thr Arg
           100

```

<210> 1217

<211> 548

<212> DNA

<213> Homo sapiens

<400> 1217

```

naccgctggg ttgacgcgct attaaacgat aagagcaaaa aaacatttcc tcatttatta
60
cgttgtcggg tgaatgatgt ttctggtgat agtcagtgga tagagatgcg aggcagtgtg
120
acagggttggg acagccgtca tcgagctcag atggtgagag ggacattcga gcgtattaac
180
catcttattg acgctgaaaa tgaattaatt gcggcccgtg aagatgctca gcgacgagag
240
cttattttat cggctttgct aaataatatt ccagaccctg tttggtctaa agatgaaagc
300
ggtcgttatt tggactgtaa ccatgcgttt tgtctgttta atggtttaga gcagagtgtat
360
gttcaggggc aaaaagacag tgaattaaac ttagataata atggtcaata ttatcaagat
420
atgggcgggtg aggtattagc gcgaggggag atttttcatg aacattgttg gggtaacgcct
480
gcagatggaa gtgacaaccg cttgtttgaa gtatatcgag tccctatcaa agagcctacc
540
gtgaattc
548

```

<210> 1218

<211> 182

<212> PRT

<213> Homo sapiens

<400> 1218

```

Xaa Ala Trp Val Asp Ala Leu Leu Asn Asp Lys Ser Lys Lys Thr Phe
 1           5           10           15
Pro His Leu Leu Arg Cys Arg Val Asn Asp Val Ser Gly Asp Ser Gln

```

20 25 30
 Trp Ile Glu Met Arg Gly Ser Val Thr Gly Trp Asp Ser Arg His Arg
 35 40 45
 Ala Gln Met Val Arg Gly Thr Phe Glu Arg Ile Asn His Leu Ile Asp
 50 55 60
 Ala Glu Asn Glu Leu Ile Ala Ala Arg Glu Asp Ala Gln Arg Arg Glu
 65 70 75 80
 Leu Ile Leu Ser Ala Leu Leu Asn Asn Ile Pro Asp Pro Val Trp Ser
 85 90 95
 Lys Asp Glu Ser Gly Arg Tyr Leu Asp Cys Asn His Ala Phe Cys Leu
 100 105 110
 Phe Asn Gly Leu Glu Gln Ser Asp Val Gln Gly Gln Lys Asp Ser Glu
 115 120 125
 Leu Asn Leu Asp Asn Asn Gly Gln Tyr Tyr Gln Asp Met Gly Gly Glu
 130 135 140
 Val Leu Ala Arg Gly Glu Ile Phe His Glu His Cys Trp Gly Thr Pro
 145 150 155 160
 Ala Asp Gly Ser Asp Asn Arg Leu Phe Glu Val Tyr Arg Val Pro Ile
 165 170 175
 Lys Glu Pro Thr Val Asn
 180

<210> 1219

<211> 308

<212> DNA

<213> Homo sapiens

<400> 1219

acgcgtgaag ggaggaatac agatggagaa atgggtccac caaaaaatga tgagggtacc
 60

tccagagaaa attaccaaga ccattctgtt agtatatttcc agctccacag gcctttggaa
 120

gttcccagac caccctccct cttttcaaac taaaacaggg atgggtctta accaccaccc
 180

aaaggcaagg ggggtcttaa aacccaaacc aagtggggca ggggccagcc tcttcaggag
 240

ggcccaaccc tgcagcctct gccatttgg gaaagaccgt gagttggaat tatgggtcgg
 300

tggggggc

308

<210> 1220

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1220

Met Glu Lys Trp Val His Gln Lys Met Met Arg Val Pro Pro Glu Lys
 1 5 10 15

Ile Thr Lys Thr Ile Leu Leu Val Phe Ser Ser Ser Thr Gly Leu Trp
 20 25 30

Lys Phe Pro Asp His Pro Pro Ser Phe Gln Thr Lys Thr Gly Met Ala
 35 40 45

Leu Asn His His Pro Lys Ala Arg Gly Val Leu Lys Pro Lys Pro Ser

50 55 60
 Gly Ala Gly Ala Ser Leu Phe Arg Arg Ala Gln Pro Cys Ser Leu Cys
 65 70 75 80
 Pro Phe Gly Lys Asp Arg Glu Leu Glu Leu Trp Val Gly Gly Gly
 85 90 95

<210> 1221

<211> 569

<212> DNA

<213> Homo sapiens

<400> 1221

gcgcgccagg ggcaggtagc ctgtggcagg tgaggctgcg tgtgggggtgt gctcccagag
 60
 gcccgtccag gaaagctgca cctcagagaa gcagtttctt tccttacctg ggaagtttct
 120
 tctgtaacac gttaagcccc acaggtaagg cctgatcccc cctggacggc tcccctctcc
 180
 agtggtccca gtctggaggt antcttttct aagccatcct ctcagaatgt gatgggtacc
 240
 aggatgcaca cccggtggcc ctgtggtgtg aggcctcagc aaacacggtc agaagatgaa
 300
 cacacagaga cccgcccgtc ggaaggagag gagggagcgg atacggaggc ccacgtgcc
 360
 gaaggggtccc ttgcagtggg gtgggttatgt gcctgcaatc ccagagtgtc ctcgaaggac
 420
 ctcatgctta acgagctcag ccggcagctg cacgtgggac cagccctctg agcttcactt
 480
 gttttcctct gtgccatcag aaaccaatac gaagataaaa tgggaaaaaa aaaaatccca
 540
 ttcacggcac agcctgccga gaaacgcgt
 569

<210> 1222

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1222

Met Asn Thr Gln Arg Pro Ala Arg Arg Lys Glu Arg Arg Glu Arg Ile
 1 5 10 15
 Arg Arg Pro Thr Cys Gln Lys Gly Pro Leu Gln Trp Cys Gly Tyr Val
 20 25 30
 Pro Ala Ile Pro Glu Cys Pro Arg Arg Thr Ser Asp Leu Thr Ser Ser
 35 40 45
 Ala Gly Ser Cys Thr Trp Asp Gln Pro Ser Glu Leu His Leu Phe Ser
 50 55 60
 Ser Val Pro Ser Glu Thr Asn Thr Lys Ile Lys Trp Glu Lys Lys Lys
 65 70 75 80
 Ser His Ser Arg His Ser Leu Pro Arg Asn Ala
 85 90

<210> 1223

<211> 450

<212> DNA

<213> Homo sapiens

<400> 1223

```

aagcttgctc aggctagtgc cgacgctgct gctctcaaac tcgtcgatgc ccaccggttg
60
ttgtgcgctc accgagaggg gccatacggg gtagacgagt ggtctcagcg catggttact
120
gtactttcag atgtgttgcc tgggtgtggc caaggccggt gggttctcgg cgaaactgca
180
atagtaacgc ataacctcgc acaattggga gtcaataacg gtgattgcgg ggtcatcggt
240
gaaacaaggc ccgtccccac gatagctcta cggggaccgc gtggagtccc cagacgggtg
300
ccctgttccc tcatcccatc gctgcaacct ttacaggcga tgacgattca caaagcgag
360
ggcagccaat tcacggacgt aacgggtggc ctgccaccac ccgactcgcc cctcctctct
420
cgtgagttgc tctataccgc catcacgcgt
450

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<210> 1224

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1224

```

Lys Leu Ala Gln Ala Ser Ala Asp Ala Ala Ala Leu Lys Leu Val Asp
1      5      10      15
Ala His Arg Leu Leu Cys Ala His Arg Glu Gly Pro Tyr Gly Val Asp
20     25     30
Glu Trp Ser Gln Arg Met Val Thr Val Leu Ser Asp Val Leu Pro Gly
35     40     45
Val Gly Gln Gly Arg Trp Val Leu Gly Glu Thr Ala Ile Val Thr His
50     55     60
Asn Leu Ala Gln Leu Gly Val Asn Asn Gly Asp Cys Gly Val Ile Val
65     70     75     80
Glu Thr Arg Pro Val Pro Thr Ile Ala Leu Pro Gly Pro Gly Gly Val
85     90     95
Pro Arg Arg Leu Pro Cys Ser Leu Ile Pro Ser Leu Gln Pro Leu Gln
100    105    110
Ala Met Thr Ile His Lys Ala Gln Gly Ser Gln Phe Thr Asp Val Thr
115    120    125
Val Val Leu Pro Pro Pro Asp Ser Pro Leu Leu Ser Arg Glu Leu Leu
130    135    140
Tyr Thr Ala Ile Thr Arg
145    150

```

<210> 1225

<211> 436

<212> DNA

<213> Homo sapiens

<400> 1225

ncccatcccc caccgggat ggtgaacact gggatggcca cttgggagct caaagtgttg
 60
 tcagtgggag gacaaggtcc tcaattcctg gcacattggc ccagagaagt catgaaaacc
 120
 caaagcccc cgaaagtaag aagtagaaaa aaacccgacc ccgaccagat gaagggacct
 180
 gggaagtttt tggaaaagag actgctgaag tgtctccttg caggcatcac cgtgagctgg
 240
 ggctttgcac acagcatctt catggctttc cacaatgatc ccagaactga tccagagaaa
 300
 cccagggatc aggggttgac ccgaccctgt catcatccca ttctacaaat gaggacactg
 360
 aggcctgggtg aaaagggagg ggtggatgga accaggtggc ctggctctaa gaccagagg
 420
 ctggagtgtg ctcatg
 436

<210> 1226

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1226

Met	Val	Asn	Thr	Gly	Met	Ala	Thr	Trp	Glu	Leu	Lys	Val	Leu	Ser	Val
1				5					10					15	
Gly	Gly	Gln	Gly	Pro	Gln	Phe	Leu	Ala	His	Trp	Pro	Arg	Glu	Val	Met
		20						25					30		
Lys	Thr	Gln	Ser	Pro	Pro	Lys	Val	Arg	Ser	Arg	Lys	Lys	Pro	Asp	Pro
		35					40					45			
Asp	Gln	Met	Lys	Gly	Pro	Gly	Lys	Phe	Leu	Glu	Lys	Arg	Leu	Leu	Lys
		50					55				60				
Cys	Leu	Leu	Ala	Gly	Ile	Thr	Val	Ser	Trp	Gly	Phe	Ala	His	Ser	Ile
65					70					75					80
Phe	Met	Ala	Phe	His	Asn	Asp	Pro	Arg	Thr	Asp	Pro	Glu	Lys	Pro	Arg
			85						90					95	
Asp	Gln	Gly	Leu	Thr	Arg	Pro	Cys	His	His	Pro	Ile	Leu	Gln	Met	Arg
			100						105					110	
Thr	Leu	Arg	Pro	Gly	Glu	Lys	Gly	Gly	Val	Asp	Gly	Thr	Arg	Trp	Pro
			115					120						125	
Gly	Ser	Lys	Thr	Gln	Arg	Leu	Glu	Cys	Ala	His					
			130					135							

<210> 1227

<211> 756

<212> DNA

<213> Homo sapiens

<400> 1227

gttgagttcc acgtgaaaca aaatgcactt tacaatagaa tgacgattcg tatcaaagat
 60
 aatggatttg gaataccgat taacaaggta gataaaatct ttgatagatt ctaccgtgtc
 120
 gacaaagcac gtacacgtaa gatgggcggt acaggactag gtctagctat ttccaaagag
 180

attgtcgaag cacataatgg ccgtatttgg gcaaatagtg tcgaaggaca aggtacatct
 240
 atcttcatta ccctaccatg tgaaattatt gaagatgggtg attgggatga atagtaaaga
 300
 atacatcaaa acgattatcc tgatactact tgtattaatg agtatcgtct taacctacat
 360
 ggtatgggaaac ttctcacctg atctatcaaa tgctgatagt acgtcatcag ataataagaa
 420
 agataattct aaacctattg gaaaaccaat gagtgcgaaa acggataaaa ccatcacacc
 480
 atttcaaadc gttcaatcta atggcgaaaa aacaaaaggt atgccagcaa caggatcatgc
 540
 agtatctcaa attttaagcc cattaaaaga taaaaatggt gattcagtag aacatttaaa
 600
 acgaaatcat aacttaatta ttctgaatt aagtataaac ttatcgttc ttgatttcac
 660
 atatgattta ccgttatcaa ttacttaag ccaagtatta aacatagatg ctaagacacc
 720
 taatcatttt aactttaatc gactactgat tgatca
 756

<210> 1228

<211> 97

<212> PRT

<213> Homo sapiens

<400> 1228

Val	Glu	Phe	His	Val	Lys	Gln	Asn	Ala	Leu	Tyr	Asn	Arg	Met	Thr	Ile
1				5					10					15	
Arg	Ile	Lys	Asp	Asn	Gly	Ile	Gly	Ile	Pro	Ile	Asn	Lys	Val	Asp	Lys
			20					25					30		
Ile	Phe	Asp	Arg	Phe	Tyr	Arg	Val	Asp	Lys	Ala	Arg	Thr	Arg	Lys	Met
		35					40					45			
Gly	Gly	Thr	Gly	Leu	Gly	Leu	Ala	Ile	Ser	Lys	Glu	Ile	Val	Glu	Ala
		50				55					60				
His	Asn	Gly	Arg	Ile	Trp	Ala	Asn	Ser	Val	Glu	Gly	Gln	Gly	Thr	Ser
65				70					75					80	
Ile	Phe	Ile	Thr	Leu	Pro	Cys	Glu	Ile	Ile	Glu	Asp	Gly	Asp	Trp	Asp
				85				90						95	

Glu

<210> 1229

<211> 377

<212> DNA

<213> Homo sapiens

<400> 1229

nacgcgtcgt gaacgcggcg tcaacagctt ttcggatata cctctgagga gcccaagatg
 60
 cttgtcgcgc ccattggcaaa ccaggggggtc gaggccactg gagcgatggg aaccgacacc
 120
 ccgctggcgc tgctatctaa ctgtccgcgg atgctctggg actatttcag tcagcttttc
 180

gctcaggttaa ccaatccgcc cttggacgct atccgcgagg agcttgtcac ctccctgacg
 240
 ggcaccatcg gcccgaggc gaacttgctt gagcctggcc cggaatcatg tcggcaagtg
 300
 gtcgtcaact acccgatcat cgattccgac cagcttgcca agatcattca catcgacgct
 360
 gacggggagc atccgga
 377

<210> 1230

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1230

Thr	Arg	Arg	Gln	Gln	Leu	Phe	Gly	Tyr	Thr	Ser	Glu	Glu	Pro	Lys	Met
1				5					10					15	
Leu	Val	Ala	Pro	Met	Ala	Asn	Gln	Gly	Val	Glu	Ala	Thr	Gly	Ala	Met
		20					25						30		
Gly	Thr	Asp	Thr	Pro	Leu	Ala	Val	Leu	Ser	Asn	Cys	Pro	Arg	Met	Leu
	35				40						45				
Trp	Asp	Tyr	Phe	Ser	Gln	Leu	Phe	Ala	Gln	Val	Thr	Asn	Pro	Pro	Leu
	50				55					60					
Asp	Ala	Ile	Arg	Glu	Glu	Leu	Val	Thr	Ser	Leu	Thr	Gly	Thr	Ile	Gly
65				70					75					80	
Pro	Glu	Ala	Asn	Leu	Leu	Glu	Pro	Gly	Pro	Glu	Ser	Cys	Arg	Gln	Val
			85				90						95		
Val	Val	Asn	Tyr	Pro	Ile	Ile	Asp	Ser	Asp	Gln	Leu	Ala	Lys	Ile	Ile
		100					105						110		
His	Ile	Asp	Ala	Asp	Gly	Glu	His	Pro							
		115					120								

<210> 1231

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1231

aaatttcatt taaaatcaat tgattgetta aataaggcag ttcattctgct gcgccaggag
 60
 cggaagtaag gagtttttat ggcggtttta atcaccggag acgccggtta tatcggttct
 120
 cacactgttc tggctttggt agaacatggc gaagatgttg tagtgttaga taatttatca
 180
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<210> 1232

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1232

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Leu Ser Asn Ser Ser Asp Glu Ser Leu Arg Arg Val Glu Lys Leu Ala
      35             40             45
Gly Arg Ser Ala Gln Phe Tyr Gln Gly Asp Ile Leu Asp Ala Glu Cys
 50             55             60
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<210> 1233

<211> 4982

<212> DNA

<213> Homo sapiens

<400> 1233

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<210> 1234

<211> 708

<212> PRT

<213> Homo sapiens

<400> 1234

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		20						25					30		
Ser	Gly	Thr	Ile	Ile	Thr	Glu	Asp	Pro	Phe	Lys	Ser	Gly	Ser	Ser	Asp
	35						40					45			
Val	Gly	Arg	Asp	Trp	Asp	Pro	Ser	Ser	Thr	Glu	Gly	Gly	Ser	Ser	Pro
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Leu	Ile	Cys	Pro	Asp	Ser	Ser	Ala	Arg	Pro	Arg	Val	Lys	Ser	Ser	Tyr
65				70						75					80
Ser	Met	Glu	Asn	Ala	Asn	Lys	Trp	Ser	Cys	His	Met	Cys	Thr	Tyr	Leu
			85						90					95	
Asn	Trp	Pro	Arg	Ala	Ile	Arg	Cys	Thr	Gln	Cys	Leu	Ser	Gln	Arg	Arg
		100						105					110		
Thr	Arg	Ser	Pro	Thr	Glu	Ser	Pro	Gln	Ser	Ser	Gly	Ser	Gly	Ser	Arg
		115						120					125		
Pro	Val	Ala	Phe	Ser	Val	Asp	Pro	Cys	Glu	Glu	Tyr	Asn	Asp	Arg	Asn
	130					135					140				
Lys	Leu	Asn	Thr	Arg	Thr	Gln	His	Trp	Thr	Cys	Ser	Val	Cys	Thr	Tyr


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Pro Asn Asn Ile Glu Ala Ile Glu Leu Ala Glu Thr Glu Glu Ala Ser
          180          185          190
Ser Ile Ile Asn Glu Gln Asp Arg Ala Arg Trp Arg Gly Ser Cys Ser
          195          200          205
Ser Gly Asn Ser Gln Arg Arg Ser Pro Pro Ala Thr Lys Arg Asp Ser
          210          215          220
Glu Val Lys Met Asp Phe Gln Arg Ile Glu Leu Ala Gly Ala Val Gly
225          230          235          240
Ser Lys Glu Glu Leu Glu Val Asp Phe Lys Lys Leu Lys Gln Ile Lys
          245          250          255
Asn Arg Met Lys Lys Thr Asp Trp Leu Phe Leu Asn Ala Cys Val Gly
          260          265          270
Val Val Glu Gly Asp Leu Ala Ala Ile Glu Ala Tyr Lys Ser Ser Gly
          275          280          285
Gly Asp Ile Ala Arg Gln Leu Thr Ala Asp Glu Val Arg Leu Leu Asn
          290          295          300
Arg Pro Ser Ala Phe Asp Val Gly Tyr Thr Leu Val His Leu Ala Ile
305          310          315          320
Arg Phe Gln Arg Gln Asp Met Leu Ala Ile Leu Leu Thr Glu Val Ser
          325          330          335
Gln Gln Ala Ala Lys Cys Ile Pro Ala Met Val Cys Pro Glu Leu Thr
          340          345          350
Glu Gln Ile Arg Arg Glu Ile Ala Ala Ser Leu His Gln Arg Lys Gly
          355          360          365
Asp Phe Ala Cys Tyr Phe Leu Thr Asp Leu Val Thr Phe Thr Leu Pro
          370          375          380
Ala Asp Ile Glu Asp Leu Pro Pro Thr Val Gln Glu Lys Leu Phe Asp
385          390          395          400
Glu Val Leu Asp Arg Asp Val Gln Lys Glu Leu Glu Glu Glu Ser Pro
          405          410          415
Ile Ile Asn Trp Ser Leu Glu Leu Ala Thr Arg Leu Asp Ser Arg Leu
          420          425          430
Tyr Ala Leu Trp Asn Arg Thr Ala Gly Asp Cys Leu Leu Asp Ser Val
          435          440          445
Leu Gln Ala Thr Trp Gly Ile Tyr Asp Lys Asp Ser Val Leu Arg Lys
          450          455          460
Ala Leu His Asp Ser Leu His Asp Cys Ser His Trp Phe Tyr Thr Arg
465          470          475          480
Trp Lys Asp Trp Glu Ser Trp Tyr Ser Gln Ser Phe Gly Leu His Phe
          485          490          495
Ser Leu Arg Glu Glu Gln Trp Gln Glu Asp Trp Ala Phe Ile Leu Ser
          500          505          510
Leu Ala Ser Gln Pro Gly Ala Ser Leu Glu Gln Thr His Ile Phe Val
          515          520          525
Leu Ala His Ile Leu Arg Arg Pro Ile Ile Val Tyr Gly Val Lys Tyr
          530          535          540
Tyr Lys Ser Phe Arg Gly Glu Thr Leu Gly Tyr Thr Arg Phe Gln Gly
545          550          555          560
Val Tyr Leu Pro Leu Trp Glu Gln Ser Phe Cys Trp Lys Ser Pro
          565          570          575
Ile Ala Leu Gly Tyr Thr Arg Gly His Phe Ser Ala Leu Val Ala Met

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      580      585      590
Glu Asn Asp Gly Tyr Gly Asn Arg Gly Ala Gly Ala Asn Leu Asn Thr
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Asp Asp Asp Val Thr Ile Thr Phe Leu Pro Leu Val Asp Ser Glu Arg
      610      615      620
Lys Leu Leu His Val His Phe Leu Ser Ala Gln Glu Leu Gly Asn Glu
      625      630      635      640
Glu Gln Gln Glu Lys Leu Leu Arg Glu Trp Leu Asp Cys Cys Val Thr
      645      650      655
Glu Gly Gly Val Leu Val Ala Met Gln Lys Ser Ser Arg Arg Arg Asn
      660      665      670
His Pro Leu Val Thr Gln Met Val Glu Lys Trp Leu Asp Arg Tyr Arg
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Gln Ile Arg Pro Cys Thr Ser Leu Ser Asp Gly Glu Glu Asp Glu Asp
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<210> 1235

<211> 383

<212> DNA

<213> Homo sapiens

<400> 1235

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<210> 1236

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1236

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Ala Asp Leu Val Ala Phe Thr Gly His Lys Met Cys Gly Pro Thr Gly
20     25     30
Ile Gly Ile Leu Trp Gly Arg Tyr Asp Leu Leu Ala Glu Leu Pro Pro
35     40     45
Phe Leu Gly Gly Gly Glu Met Ile Glu Val Val Arg Met Glu Gly Ser
50     55     60
Thr Tyr Ala Glu Pro Pro His Arg Phe Glu Ala Gly Thr Pro Pro Ile

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65		70		75		80
Ala	Gln	Leu	Ala	Ala	Leu	Gly
			Val	Ala	Ala	Asp
				Tyr	Leu	Asp
					Gly	Ile
		85		90		95
Gly	Met	Gln	Ala	Ile	Ala	Glu
			His	Glu	His	Glu
				Leu	Ala	Ala
					Arg	Met
	100			105		110
Leu	Glu	Asp	Tyr	Gln	Thr	Val
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<210> 1237

<211> 1608

<212> DNA

<213> Homo sapiens

<400> 1237

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<210> 1238

<211> 458

<212> PRT

<213> Homo sapiens

<400> 1238

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		20						25					30		
Phe	Pro	Glu	Leu	Gln	Leu	Pro	Val	Ser	Pro	Ser	Val	Cys	Leu	Asp	Gln
		35					40					45			
Gly	Met	Gln	Leu	Lys	Pro	Ser	Thr	Ser	Ser	His	Leu	Leu	Lys	Thr	Val
	50					55					60				
Lys	Pro	Arg	Val	Trp	Lys	Pro	Gly	Asp	Trp	Ser	Arg	Glu	Gln	Leu	Asn
	65				70					75				80	
Glu	Thr	Thr	Val	Leu	Ala	Pro	His	Glu	Thr	Ile	Phe	Arg	Ala	Lys	Asp
			85					90						95	
Leu	Ser	Val	Ile	Leu	Lys	Ala	Tyr	Val	Leu	Val	Thr	Ser	Leu	Thr	Pro
		100						105					110		
Leu	Arg	Ala	Phe	Ile	His	Ser	Thr	Gly	Thr	Val	Trp	Asn	Pro	Pro	Lys
		115					120					125			
Lys	Lys	Arg	Phe	Thr	Val	Lys	Leu	Gln	Thr	Phe	Phe	Glu	Thr	Phe	Leu
	130					135					140				
Arg	Ala	Ser	Ser	Pro	Gln	Gln	Ala	Phe	Asp	Ile	Met	Lys	Glu	Ala	Ile
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			165					170						175	
Gly	Pro	Lys	Thr	Phe	His	Arg	Cys	Arg	Phe	Cys	Phe	Gln	Leu	Leu	Thr
		180					185						190		
Phe	Asp	Ile	Gly	Tyr	Gly	Ser	Phe	Met	Tyr	Pro	Val	Val	Leu	Gln	Val
	195					200						205			
His	Glu	His	Leu	Asn	Phe	Gln	Asp	Tyr	Asp	Asn	Met	Asp	Phe	Glu	Asp
	210					215					220				
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	225				230					235				240	
Pro	Asn	Glu	Ser	Ser	Leu	Ser	Ile	Phe	Ser	Glu	Ile	Phe	Gln	Arg	Leu
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 290 295 300
 Pro Gly Ile Gln Ser Leu Met His Glu Phe Tyr Asp Val Ala Asn Pro
 305 310 315 320
 Val Gly Asn Pro Gly Ser Val Leu Thr Gln Tyr Trp Ser Leu Leu Asn
 325 330 335
 Val Phe Glu Gln Phe Gln Phe Met Asn Lys Lys Thr Gln Pro His Pro
 340 345 350
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 355 360 365
 Val Pro Phe Asp Ala Ile Glu Asn Lys Lys Ala Ala Val Pro Gln Ile
 370 375 380
 Lys Asn Glu Asn Lys Glu Ile His Cys Ser Asp Asp Glu Asn Thr Pro
 385 390 395 400
 Cys His Ile Lys Gln Ile Phe Thr His Pro His Leu Glu Leu Asn Pro
 405 410 415
 Asp Phe His Pro Lys Ile Lys Asp Tyr Tyr Cys Glu Val Pro Phe Asp
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<210> 1239

<211> 447

<212> DNA

<213> Homo sapiens

<400> 1239

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 atgcagaagg atttggagaa tattacatcc aaagagataa gaacagagtt ggaaatgcaa
 120

 atggtgtgca acttgcgga attcaaggaa tttatagaca atgaaatgat agtgcctt
 180

 ggtcaaattg atagccctac acagatatgt gagcatgtgt tcctgggctc agaattggaat
 240

 gcctccaact tagaggactt acagaaccga ggggtacggt atatcttgaa tgtcactcga
 300

 gagatagata actttttccc aggagtcttt gagtatcata acattcgggt atatgatgaa
 360

 gaggcaacgg atctcctggc gtactggaat gacacttaca aattcatctc taaagcaaag
 420

 aaacatggat ctaaagcct tgtgcac
 447

<210> 1240

<211> 149

<212> PRT

<213> Homo sapiens

<400> 1240

Ile Pro Thr Glu Arg Glu Arg Thr Glu Arg Leu Ile Lys Thr Lys Leu
 1 5 10 15
 Arg Glu Ile Met Met Gln Lys Asp Leu Glu Asn Ile Thr Ser Lys Glu
 20 25 30
 Ile Arg Thr Glu Leu Glu Met Gln Met Val Cys Asn Leu Arg Glu Phe
 35 40 45
 Lys Glu Phe Ile Asp Asn Glu Met Ile Val Ile Leu Gly Gln Met Asp
 50 55 60
 Ser Pro Thr Gln Ile Phe Glu His Val Phe Leu Gly Ser Glu Trp Asn
 65 70 75 80
 Ala Ser Asn Leu Glu Asp Leu Gln Asn Arg Gly Val Arg Tyr Ile Leu
 85 90 95
 Asn Val Thr Arg Glu Ile Asp Asn Phe Phe Pro Gly Val Phe Glu Tyr
 100 105 110
 His Asn Ile Arg Val Tyr Asp Glu Glu Ala Thr Asp Leu Leu Ala Tyr
 115 120 125
 Trp Asn Asp Thr Tyr Lys Phe Ile Ser Lys Ala Lys Lys His Gly Ser
 130 135 140
 Lys Cys Leu Val His
 145

<210> 1241

<211> 489

<212> DNA

<213> Homo sapiens

<400> 1241

acgcgtgtgc agcgtatcca gcaccgtcct cagaataata gctgtgaaaa ggaggaaggg
 60
 aactaggcag acagaccgac agataggggg aaaccgggat gtttaatgtg tccgaacaag
 120
 taggaagatc aatgaggcgc gagtgtgtgt gtgtacgtgt gcgcgtgtgt gtgtgagaga
 180
 gagagaaaga aagaagaaag gtcccgattg caacgtgtca gatcttgcaa cttccccccc
 240
 acccaacaca acaaccctca gacacaaaaa caccattgct gactgatacc ccaggtcttc
 300
 aggggttaaag gaaccgtgtg ttggcagcgc aattgtgcag acgctgtaag gccaaaacga
 360
 ggatttgtgt tgtgaggctg gtggtgcggt cttttctttt tcttctcgcc tgttttcccg
 420
 gagtgcctgg gttgcgagaa aggcgcacgc caggctgtgc agccgaatcg cttcgcaatt
 480
 attcatgct
 489

<210> 1242

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1242

Met Asn Asn Cys Glu Ala Ile Arg Leu His Ser Leu Arg Cys Ala Phe

```

      1             5             10             15
Leu Ala Thr Gln Ala Leu Arg Glu Asn Arg Arg Glu Glu Lys Glu Lys
      20             25             30
Asn Ala Pro Pro Thr Ser Gln His Lys Ser Ser Phe Trp Pro Tyr Ser
      35             40             45
Val Cys Thr Ile Ala Leu Pro Thr His Gly Ser Phe Asn Pro Glu Asp
      50             55             60
Leu Gly Tyr Gln Ser Ala Met Val Phe Leu Cys Leu Arg Val Val Val
      65             70             75             80
Leu Gly Gly Gly Lys Val Ala Arg Ser Asp Thr Leu Gln Ser Gly Pro
      85             90             95
Phe Phe Phe Leu Ser Leu Ser Leu Thr His Thr Arg Ala His Val His
      100            105            110
Thr His Thr Arg Ala Ser Leu Ile Phe Leu Leu Val Arg Thr His
      115            120            125

```

<210> 1243

<211> 390

<212> DNA

<213> Homo sapiens

<400> 1243

```

ntagactccg tcgatcccct catggagaat ccagtgtgcc aggtcccttc ggcgtactgg
60
gagatgatat acctaccggg aatgttcact gtctacttcg atggccagtt ctgggtcgga
120
gtcctagaga ggcgcgacga ggggttggtg cgtgccgtaa aagtcacgtt tggcgccgaa
180
ccgtctgaca cggaattgta cgggtgggtt agccgtcatg gcaacgcact tatagagcga
240
ttggagtcta ccgtgtgtgt ccctaccacc cgcagtcgcc gagccaagcg actgaacccc
300
aagagggcgt tacgagatgc agcgcgagct gcccaagcac accgtgccag cagcnccgca
360
caggccgcga ttaaggccga tcaggaagct
390

```

<210> 1244

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1244

```

Xaa Asp Ser Val Asp Pro Leu Met Glu Asn Pro Val Cys Gln Val Pro
      1             5             10             15
Ser Ala Tyr Trp Glu Met Ile Tyr Leu Pro Gly Met Phe Thr Val Tyr
      20             25             30
Phe Asp Gly Gln Phe Trp Val Gly Val Leu Glu Arg Arg Asp Glu Gly
      35             40             45
Leu Val Arg Ala Val Lys Val Thr Phe Gly Ala Glu Pro Ser Asp Thr
      50             55             60
Glu Leu Tyr Gly Trp Val Ser Arg His Gly Asn Ala Leu Ile Glu Arg
      65             70             75             80
Leu Glu Ser Thr Ala Ala Val Pro Thr Thr Arg Ser Pro Arg Ala Lys

```

```

      85      90      95
Arg Leu Asn Pro Lys Arg Ala Leu Arg Asp Ala Ala Arg Ala Ala Gln
      100      105      110
Ala His Arg Ala Ser Thr Xaa Ala Gln Ala Ala Ile Lys Ala Asp Gln
      115      120      125
Glu Ala
      130

```

<210> 1245
 <211> 339
 <212> DNA
 <213> Homo sapiens

```

<400> 1245
gccaaagcagc aaaaaccaca gatcattgct atgggaaatg tgtcattttc ttgttcacaa
60
ccacaatcta tgcccgtagc ttttctgagc tccaggagtt ttttagcact gccagacttc
120
tctggagagg aggaggtttc tgccactttt caatttcgaa cttggaataa ggcagggttc
180
ctgctgttca gtgaacttca gctgatttca gggggtatcc tctcttttct gattgatgga
240
aaacttaagt cgaatctcta ccagccaaga aaattaccca gtgacatcac agcagggtgc
300
gaattaaatg atgggcagtg gcattctgtc tctttatct
339

```

<210> 1246
 <211> 113
 <212> PRT
 <213> Homo sapiens

```

<400> 1246
Ala Lys Gln Gln Lys Pro Gln Ile Ile Ala Met Gly Asn Val Ser Phe
1      5      10      15
Ser Cys Ser Gln Pro Gln Ser Met Pro Val Thr Phe Leu Ser Ser Arg
      20      25      30
Ser Phe Leu Ala Leu Pro Asp Phe Ser Gly Glu Glu Glu Val Ser Ala
      35      40      45
Thr Phe Gln Phe Arg Thr Trp Asn Lys Ala Gly Leu Leu Leu Phe Ser
      50      55      60
Glu Leu Gln Leu Ile Ser Gly Gly Ile Leu Leu Phe Leu Ser Asp Gly
65      70      75      80
Lys Leu Lys Ser Asn Leu Tyr Gln Pro Arg Lys Leu Pro Ser Asp Ile
      85      90      95
Thr Ala Gly Val Glu Leu Asn Asp Gly Gln Trp His Ser Val Ser Leu
      100      105      110
Ser

```

<210> 1247
 <211> 366
 <212> DNA
 <213> Homo sapiens

<400> 1247

ttgacctcca acccgggcac gcgcacccctg cccagatcc cgatggatgg gcatgacctc
60
aaccgggtgt ggcgggacgt cggcctgac gtgcacccgc cgatgctcta catgggctac
120
gtcggtttct ccgtggcctt tgcgtttgcc atcgccgect tgctcggcgg gcgcctcgat
180
gcggcctggg cgcgctggtc gcggccatgg accattgtgg cctgggctgt cctcgggtac
240
ggatcacccc tcggttcgtg gtgggcctac tacgaactcg gctggngcgg ctggtgggtc
300
tgggaccccg gggaaaaccc cttcttcacg ccctggctgg ggggcacccc gctgattcac
360
tcgctg
366

<210> 1248

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1248

Leu Thr Ser Asn Pro Gly Thr Arg Ile Leu Pro Gln Ile Pro Met Asp
1 5 10 15
Gly His Asp Leu Asn Pro Val Trp Arg Asp Val Gly Leu Ile Val His
20 25 30
Pro Pro Met Leu Tyr Met Gly Tyr Val Gly Phe Ser Val Ala Phe Ala
35 40 45
Phe Ala Ile Ala Ala Leu Leu Gly Gly Arg Leu Asp Ala Ala Trp Ala
50 55 60
Arg Trp Ser Arg Pro Trp Thr Ile Val Ala Trp Ala Phe Leu Gly Ile
65 70 75 80
Gly Ile Thr Leu Gly Ser Trp Trp Ala Tyr Tyr Glu Leu Gly Trp Xaa
85 90 95
Gly Trp Trp Phe Trp Asp Pro Gly Glu Asn Pro Phe Phe Met Pro Trp
100 105 110
Leu Gly Gly Thr Pro Leu Ile His Ser Leu
115 120

<210> 1249

<211> 374

<212> DNA

<213> Homo sapiens

<400> 1249

acgcgtgtcc tcaacaccct ggcgccacg ctgattgccg tggaaccggt gccggcaatg
60
ggcgcgagct tgagcaagct gctgccggat gtgcacctgg tcaatggcac tgccgaggcc
120
attccactgg aaagcgccgt ggcggtatgcg gtggtgtgcg cacaagcctt ccattggttt
180
tccagcgagg cggccctggc ggaaatccat cgggtactca aaccggatgg gcgcctgggg
240

ctggtgtgga atgtgcgga cgagtcggtg gattgggtcg ccgccattac tcaaatac
 300
 acgccttatg aaggcgacac gccgcgcttt cataccggcc gttggcgga agccttcact
 360
 ggcgagtatt ttg
 374

<210> 1250

<211> 124

<212> PRT

<213> Homo sapiens

<400> 1250

Thr	Arg	Val	Leu	Asn	Thr	Leu	Ala	Pro	Thr	Leu	Ile	Ala	Val	Glu	Pro
1				5					10					15	
Val	Pro	Ala	Met	Gly	Ala	Gln	Leu	Ser	Lys	Leu	Leu	Pro	Asp	Val	His
		20						25					30		
Leu	Val	Asn	Gly	Thr	Ala	Glu	Ala	Ile	Pro	Leu	Glu	Ser	Ala	Val	Ala
		35					40					45			
Asp	Ala	Val	Val	Cys	Ala	Gln	Ala	Phe	His	Trp	Phe	Ser	Ser	Glu	Ala
	50					55					60				
Ala	Leu	Ala	Glu	Ile	His	Arg	Val	Leu	Lys	Pro	Asp	Gly	Arg	Leu	Gly
65					70					75				80	
Leu	Val	Trp	Asn	Val	Arg	Asp	Glu	Ser	Val	Asp	Trp	Val	Ala	Ala	Ile
			85						90					95	
Thr	Gln	Ile	Ile	Thr	Pro	Tyr	Glu	Gly	Asp	Thr	Pro	Arg	Phe	His	Thr
			100					105					110		
Gly	Arg	Trp	Arg	Glu	Ala	Phe	Thr	Gly	Glu	Tyr	Phe				
		115						120							

<210> 1251

<211> 742

<212> DNA

<213> Homo sapiens

<400> 1251

accggtctct tcctcgaaa ggcagggccg aggggcttgc ggggcagcca tggaggcgac
 60
 gcggaggcgg cagcacgtgg gagcgacggg cggcccaggc gcgcagttgg gcgcctcctt
 120
 ccctgcaggc caggcatggc tctgtgagcg ctgatgaggc tgcccgcacg gctcccttcc
 180
 acctcgacct ctggttctac ttcacactgc agaactgggt tctggacttt gggcgctcca
 240
 ttgccatgct ggtattccct ctcgagtggg ttccactcaa caagcccagt gttggggact
 300
 acttccacat ggcctacaac gtcatacgc cctttctctt gctcaagctc atcgagcggg
 360
 cccccgcac cctgtacgc tccatcacgt acgtgagcat catcatcttc atcatgggtg
 420
 ccagcatcca cctgggtggg gactctgtca accaccgcct gctcttcagt ggctaccagc
 480
 accacctgtc tgtccgtgag aaccccatca tcaagaatct caagccggag acgctgatcg
 540

actcctttga gctgctctac tattatgatg agtacctggg tcaactgcatg tggtagatcc
 600
 ccttcttccat catcctcttc atgtacttca gcggtgctn ttactgctc taaagctgag
 660
 agcttgatcc cagggcctgc cctgctctg gtggcaccca gtggcctgta ctactggtag
 720
 ctggtcaccg agggccagat ct
 742

<210> 1252

<211> 80

<212> PRT

<213> Homo sapiens

<400> 1252

Met	Arg	Leu	Pro	Ala	Arg	Leu	Pro	Ser	Thr	Ser	Thr	Ser	Gly	Ser	Thr
1				5					10				15		
Ser	His	Cys	Arg	Thr	Gly	Phe	Trp	Thr	Leu	Gly	Val	Pro	Leu	Pro	Cys
			20					25				30			
Trp	Tyr	Ser	Leu	Ser	Ser	Gly	Phe	His	Ser	Thr	Ser	Pro	Val	Leu	Gly
			35				40					45			
Thr	Thr	Ser	Thr	Trp	Pro	Thr	Thr	Ser	Ser	Arg	Pro	Phe	Ser	Cys	Ser
	50					55					60				
Ser	Ser	Ser	Ser	Gly	Pro	Pro	Ala	Pro	Cys	Tyr	Ala	Pro	Ser	Arg	Thr
65				70					75					80	

<210> 1253

<211> 675

<212> DNA

<213> Homo sapiens

<400> 1253

gggccccctc ccaggcgctt tctgggagct tttagaactg cgctctgaag tttccagaga
 60
 gcgaggagct tttgcggcag gcagagacaa tggaagaaaa tgaaagccag aaatgtgagc
 120
 cgtgccttcc ttactcagca gacagaagac agatgcagga acaaggcaaa ggcaatctgc
 180
 atgtaacatc accagaagat gcagaatgcc gcagaaccaa ggaacgcctt tctaattgaa
 240
 acagtctggt ttcagtttcc aagtcttccc gcaatatccc aaggagacac accctagggg
 300
 ggccccgaag ttccaaggaa atactgggaa tgcaaacatc tgagatggat cggaagagag
 360
 gaaaaagcgt tcctagaaca tctgaagcag aagtaccccc accacgcctc tgcaatcatg
 420
 ggtcaccaag agaggctgag agaccagaca aggatcccca aactgtctca cagtcctcaa
 480
 ccaccagtgt tgggtgaccc ggtcgagcat ttatcagaga cgtccgctga ttctttggaa
 540
 gccatgtctg agggggatgc tccaaccctt tttccagag gcagccggac tcgtgcgagc
 600
 cttctgtgtg tgaggtcaac caaccagacg aaagaaagat ctctgggggt tctctatctc
 660

cagtatggag atgaa
675

<210> 1254
<211> 86
<212> PRT
<213> Homo sapiens

<400> 1254
Met Gly His Gln Glu Arg Leu Arg Asp Gln Thr Arg Ile Pro Lys Leu
1 5 10 15
Ser His Ser Pro Gln Pro Pro Ser Val Gly Asp Pro Val Glu His Leu
20 25 30
Ser Glu Thr Ser Ala Asp Ser Leu Glu Ala Met Ser Glu Gly Asp Ala
35 40 45
Pro Thr Pro Phe Ser Arg Gly Ser Arg Thr Arg Ala Ser Leu Pro Val
50 55 60
Val Arg Ser Thr Asn Gln Thr Lys Glu Arg Ser Leu Gly Val Leu Tyr
65 70 75 80
Leu Gln Tyr Gly Asp Glu
85

<210> 1255
<211> 401
<212> DNA
<213> Homo sapiens

<400> 1255
nccgccgatta ccaaggctat ggatgtgtgg gccttgggag taacgctata ctgtctgctg
60
ttcgggtcgag tgccatttga tgcagagacg gactacttgc tgctggaaag taccctgcac
120
gacgattatg ccgtcccgac gcacatgggt agcgaccgag tgttggtagg cccgcgacca
180
gcacgttggc cctcgtcgca agagacgccc aacgtgcccgc tgcctggcga ggcgcacgca
240
gtacgccatc tgctcgatgc ccttctcgac aaggatccag cgacgcgcct cactctcgat
300
cgtgttataa cacacccatg gctcgtggca gactcatggt aatagtagca attgtatata
360
ccctcatcac caagatggcc aaagcggtag aaggcccgag g
401

<210> 1256
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1256
Xaa Pro Ile Thr Lys Ala Met Asp Val Trp Ala Leu Gly Val Thr Leu
1 5 10 15
Tyr Cys Leu Leu Phe Gly Arg Val Pro Phe Asp Ala Glu Thr Glu Tyr
20 25 30
Leu Leu Leu Glu Ser Ile Leu His Asp Asp Tyr Ala Val Pro Thr His

```

      35              40              45
Met Gly Ser Asp Arg Val Leu Val Gly Pro Arg Pro Ala Arg Trp Pro
  50              55              60
Ser Ser Gln Glu Thr Pro Asn Val Pro Leu Ser Gly Glu Ala His Ala
65              70              75              80
Val Arg His Leu Leu Asp Ala Leu Leu Asp Lys Asp Pro Ala Thr Arg
      85              90              95
Leu Thr Leu Asp Arg Val Ile Thr His Pro Trp Leu Val Ala Glu Ser
      100              105              110
Trp

```

<210> 1257

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1257

```

cgcgtacagc tgattgaagg tgatgtcgcc aacgccgacc tgggtggcgca agccgccatc
60
ggcgccacgg cggtggtgca tttggcagcg gtggcttcgg tgcaagcctc ggtggatgac
120
ccggtcagca cgcgccagag caattttgtc ggcaccttga atgtctgcga agccatgcgc
180
aaggccgggtg tgaagcgtgt ggtattttgct tccagcgttg cggtgtatgg caacaatggc
240
gagggcgctt cgattgacga agagaccatc aaggcccgcc tgacgcctta cgcg
294

```

<210> 1258

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1258

```

Arg Val Gln Leu Ile Glu Gly Asp Val Ala Asn Ala Asp Leu Val Ala
  1              5              10              15
Gln Ala Ala Ile Gly Ala Thr Ala Val Val His Leu Ala Ala Val Ala
      20              25              30
Ser Val Gln Ala Ser Val Asp Asp Pro Val Ser Thr Arg Gln Ser Asn
      35              40              45
Phe Val Gly Thr Leu Asn Val Cys Glu Ala Met Arg Lys Ala Gly Val
      50              55              60
Lys Arg Val Val Phe Ala Ser Ser Val Ala Val Tyr Gly Asn Asn Gly
65              70              75              80
Glu Gly Ala Ser Ile Asp Glu Glu Thr Ile Lys Ala Pro Leu Thr Pro
      85              90              95
Tyr Ala

```

<210> 1259

<211> 417

<212> DNA

<213> Homo sapiens

<400> 1259

nnacactcta gcctctgact caaggaagct gccacagggtc ttgcccttcg gtttggggg
 60
 atcccgcttc ccttcgtctg gagcagacat agtgagaacg tgagaagctg .caggcggtggc
 120
 ctacacgtgg tgtgttccaa gatgtccagg gccaaaggatg ccgtgtcctc cgggggtggcc
 180
 agcgtggtgg acgtggctaa gggagtgggtc cagggaggcc tggacaccac tcggtctgca
 240
 cttacgggca ccaaggaggc ggtgtccagc ggggtcacag gggccatgga catggctaag
 300
 ggggccgtcc aaggggggtct ggacacctcg aaggctgtcc tcaccggcac caaggacacg
 360
 gtgtccactg ggctcacggg ggcagtgaat gtggccaaag ggcccgtaca ggccggc
 417

<210> 1260

<211> 133

<212> PRT

<213> Homo sapiens

<400> 1260

Leu Lys Glu Ala Ala Gln Gly Leu Ala Leu Arg Phe Gly Gly Ile Pro
 1 5 10 15
 Ser Pro Phe Val Trp Ser Arg His Ser Glu Asn Val Arg Ser Cys Arg
 20 25 30
 Arg Gly Leu Thr Val Val Cys Ser Lys Met Ser Arg Ala Lys Asp Ala
 35 40 45
 Val Ser Ser Gly Val Ala Ser Val Val Asp Val Ala Lys Gly Val Val
 50 55 60
 Gln Gly Gly Leu Asp Thr Thr Arg Ser Ala Leu Thr Gly Thr Lys Glu
 65 70 75 80
 Ala Val Ser Ser Gly Val Thr Gly Ala Met Asp Met Ala Lys Gly Ala
 85 90 95
 Val Gln Gly Gly Leu Asp Thr Ser Lys Ala Val Leu Thr Gly Thr Lys
 100 105 110
 Asp Thr Val Ser Thr Gly Leu Thr Gly Ala Val Asn Val Ala Lys Gly
 115 120 125
 Pro Val Gln Ala Gly
 130

<210> 1261

<211> 330

<212> DNA

<213> Homo sapiens

<400> 1261

ngtgcacgtg ccgttcggca tcaggagatg aacatggatt tgaacgctga agtcgatcag
 60
 ctggtccgcc aatcccagac ctggatcccc ttgatcatgg agtacggcag ccgcctgctg
 120tgacctggc ggtcggtgg tggatcgaca acaaggtcag cgcccgcctg 180
 ggcaaacctg taggcctgag caacgccgac ctggcactgc aaggctttat cagcaccttg
 240

tcgaacatcg ggctgaaagt gctgctgttc gtcagtgtgg cgtcgatgat cggcattgag

300

accacctcgt tcgtcgcgga catcggtgct

330

<210> 1262

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1262

Xaa	Ala	Arg	Ala	Val	Arg	His	Gln	Glu	Met	Asn	Met	Asp	Leu	Asn	Ala
1				5					10					15	
Glu	Val	Asp	Gln	Leu	Val	Arg	Gln	Ser	Gln	Thr	Trp	Ile	Pro	Leu	Ile
		20					25					30			
Met	Glu	Tyr	Gly	Ser	Arg	Leu	Leu	Leu	Ala	Leu	Leu	Thr	Leu	Ala	Val
		35				40					45				
Gly	Trp	Trp	Ile	Asp	Asn	Lys	Val	Ser	Ala	Arg	Leu	Gly	Lys	Leu	Val
	50				55				60						
Gly	Leu	Arg	Asn	Ala	Asp	Leu	Ala	Leu	Gln	Gly	Phe	Ile	Ser	Thr	Leu
65			70						75				80		
Ser	Asn	Ile	Gly	Leu	Lys	Val	Leu	Leu	Phe	Val	Ser	Val	Ala	Ser	Met
		85						90				95			
Ile	Gly	Ile	Glu	Thr	Thr	Ser	Phe	Val	Ala	Asp	Ile	Gly	Ala		
		100					105					110			

<210> 1263

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1263

acgcgtggac gatggacttc gtcggtctgc ggtacgacga agggctcaac attgccgggtg
60
gcacgatga tgagtttgcg cgcttgggca acacctagca gcaatggcat cgatagtccc
120
tgcccagcct gtcctatttc gacgacgatg gtgcggggt tcagtttctt ctcgctccac
180
gtcaacagac cgtcacctg gttgacgac tcgcccgttg aggcgtcctt gacgacgatc
240
tgccacgcg ccaggaata catctcccca tccacccaaa agaacgcccc caagctgggc
300
atcttgccca gcccgatgat cgagagggtt tcaacaagcg actcgggatc c
351

<210> 1264

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1264

Met	Pro	Ser	Leu	Gly	Ala	Phe	Phe	Trp	Val	Asp	Gly	Glu	Met	Tyr	Ser
1			5					10				15			
Leu	Ala	Arg	Gly	Gln	Ile	Val	Val	Lys	Asp	Ala	Ser	Thr	Gly	Glu	Ile

```

      20      25      30
Val Asn His Gly Asp Gly Leu Leu Thr Trp Ser Glu Lys Lys Leu Asn
      35      40      45
Pro Ala Thr Ile Val Val Glu Met Glu Gln Ala Gly Gln Gly Leu Ser
      50      55      60
Met Pro Leu Leu Leu Gly Val Ala Gln Ala Ser Lys Leu Ile Ile Asp
      65      70      75      80
Ala Thr Gly Asn Val Glu Pro Phe Val Val Pro Gln Thr Asp Glu Val
      85      90      95
His Arg Pro Arg
      100

```

<210> 1265
 <211> 318
 <212> DNA
 <213> Homo sapiens

```

<400> 1265
accggtgtat gcaactgaaa tgctgtccga tatgcctgcg ctccagctcg tgaatcgaaa
60
gttgataaac gctcgcttgg tggaatcgtc gctacggaag cttatcaagg atacggatgc
120
tgctgcaccg ccaaaattat ggacgcccc cgacccact cgctctgacg ataccattgc
180
acagccgaaa gtgcaaccag cccaagcagt gggagatgac tcgatcatgt cggtcgatga
240
gctgatgca accgtccatg acatgccact caccacgaca ctcgacaacg tgggtcgctc
300
agatccatcg cgacgcgt
318

```

<210> 1266
 <211> 99
 <212> PRT
 <213> Homo sapiens

```

<400> 1266
Met Leu Ser Asp Met Pro Ala Leu Gln Leu Val Asn Arg Lys Leu Asp
1      5      10      15
Asn Ala Arg Leu Val Glu Ser Ser Leu Arg Lys Leu Ile Lys Asp Thr
20      25      30
Asp Ala Ala Ala Pro Pro Lys Leu Trp Thr Pro Pro Asp Pro Thr Arg
35      40      45
Ser Asp Asp Thr Ile Ala Gln Pro Lys Val Gln Pro Ala Gln Ala Val
50      55      60
Gly Asp Asp Ser Ile Met Ser Val Asp Glu Pro Asp Ala Thr Val His
65      70      75      80
Asp Met Pro Leu Thr Thr Leu Asp Asn Val Gly Arg Ser Asp Pro
85      90      95
Ser Arg Arg

```

<210> 1267
 <211> 343

ggttgggtga ggcggacaat ccctttcatc atgagcaatt ccgggagaat ggcgggccgc
 360
 acggggaaga gggttggatc ggcattggcct c
 391

<210> 1270
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1270
 Met Met Lys Gly Ile Val Arg Leu Thr Gln Pro Pro Glu Val Arg Ile
 1 5 10 15
 Leu His Ala His Glu Ala Ser His Pro Pro Arg Glu Ala Ala Gly His
 20 25 30
 Arg His Gly Arg Cys Gln Asp His Arg Cys Gly Glu Pro Ala Val Arg
 35 40 45
 Pro Arg Ser Gly Cys Arg Ile Val Ala Lys Asp Gln Arg Phe Arg Thr
 50 55 60
 Arg Cys Arg Ser Pro Arg Arg Gly Gly Thr Pro Pro Gly Arg Ser Ala
 65 70 75 80
 Arg Leu Gly Arg Pro Ala Pro Gly Arg Arg Pro Ala Met Arg Pro Ala
 85 90 95
 Gly Arg Arg Gln Pro Ser Ala Ala Pro Ile Ala Pro Asp Arg
 100 105 110

<210> 1271
 <211> 661
 <212> DNA
 <213> Homo sapiens

<400> 1271
 acgcgtcggt actggccacc tgccgagcgca ccagggtagg cagcactcgg tctccgtcga
 60
 accagaaagc gtcattcggtg tggatgaacga gaacggggcga tggatgtggtg ggacggataa
 120
 cccccgggtg cgtcaccata tggcccaacta aagagttcac cagggttgat ttaccagccc
 180
 cggatcgaccc tctaccacc gccagaagcg gcgcatcaat agtctctaag cgcggaacaa
 240
 tatagtcggt aagctgggta gcgatgcgtc gtgccagccc ggcttgagta atagcctccg
 300
 gcaaatccaa ggggaactgg gcctgacgca ggttgtgccg cagatcggtc aacgacagca
 360
 gtatctgctc agtggttcgt gtgacccctc ctgggtcactc gtcaggcctg tggcgggccc
 420
 cactgcaact cgttgttgac cggctggttg cgacgtcgct tgaggaatgc gggcagtcctc
 480
 ggcttcgaca atttggcacc tcggggcgacg gtgatagccg ccggggcgag cacgttcata
 540
 cggttgatga gtcgatctg aagcggacca ggatcatcgt ccaaccacg cacaatggcg
 600
 tcacgaagat aagcaagatc tgtcccaacg cgcaggaact ctaacgtgtg ccaccaccgg
 660

t

661

<210> 1272

<211> 126

<212> PRT

<213> Homo sapiens

<400> 1272

```

Met Asn Thr Glu Gln Ile Leu Leu Ser Leu Thr Asp Leu Arg His Asn
 1           5           10           15
Leu Arg Gln Ala Gln Phe Pro Leu Asp Leu Pro Glu Ala Ile Thr Gln
      20           25           30
Ala Gly Leu Ala Arg Arg Ile Ala Asn Gln Leu Asn Asp Tyr Ile Leu
      35           40           45
Pro Arg Leu Glu Thr Ile Asp Ala Pro Leu Leu Ala Val Val Gly Gly
      50           55           60
Ser Thr Gly Ala Gly Lys Ser Thr Leu Val Asn Ser Leu Val Gly His
65           70           75           80
Met Val Thr Gln Pro Gly Val Ile Arg Pro Thr Thr Thr Ser Pro Val
      85           90           95
Leu Val His His Pro Asp Asp Ala Phe Trp Phe Asp Gly Asp Arg Val
      100          105          110
Leu Pro Thr Leu Val Arg Ser Gln Val Ala Ser Asn Asp Ala
      115          120          125

```

<210> 1273

<211> 489

<212> DNA

<213> Homo sapiens

<400> 1273

```

gccggcgaga ccggtgccgg aaagaccatg gtggtcaccg gtattggttt gctgctcggc
60
gacaaggctg acactggatt ggtccggcat ggctgcgacg gtgccgtcgt cgaagccgtt
120
ctcgacacgc ctgatgccgg tcgcgtcagc gagcttggcg gaacagtcga ggatggtagag
180
gttatctgcg ctcgacacat cacgagtcgt cgctctcgag cgctgcttgg aggagctcaa
240
gttaccgcta gtcagctggc ccacatcggt ggggatcagg tgaccatcca tggccaatct
300
gaacaagtga ggttggtcga cgcagcgagg cagctcgacg tcgttgaccg ggctgccgga
360
gatgagctgg caggctacct aagtcgacat gcacagctgt ggtcggagtt tcgtgctgca
420
tcccagcgtc ttcagcgctt caacgaggat cgcgctgggg ccgagatgga acgcgaggtg
480
cttacgcgt
489

```

<210> 1274

<211> 163

<212> PRT

<213> Homo sapiens

<400> 1274

```

Ala Gly Glu Thr Gly Ala Gly Lys Thr Met Val Val Thr Gly Ile Gly
 1           5           10           15
Leu Leu Leu Gly Asp Lys Ala Asp Thr Gly Leu Val Arg His Gly Cys
      20           25           30
Asp Arg Ala Val Val Glu Ala Val Leu Asp Thr Pro Asp Ala Gly Arg
      35           40           45
Val Ser Glu Leu Gly Gly Thr Val Glu Asp Gly Glu Val Ile Cys Ala
      50           55           60
Arg His Ile Thr Ser Arg Arg Ser Arg Ala Leu Leu Gly Gly Ala Gln
65           70           75           80
Val Thr Ala Ser Gln Leu Ala His Ile Val Gly Asp Gln Val Thr Ile
      85           90           95
His Gly Gln Ser Glu Gln Val Arg Leu Val Asp Ala Ala Arg Gln Leu
      100          105          110
Asp Val Val Asp Arg Ala Ala Gly Asp Glu Leu Ala Gly Tyr Leu Ser
      115          120          125
Arg His Ala Gln Leu Trp Ser Glu Phe Arg Ala Ala Ser Gln Arg Leu
      130          135          140
Gln Arg Leu Asn Glu Asp Arg Ala Gly Ala Glu Met Glu Arg Glu Val
145          150          155          160
Leu Thr Arg

```

<210> 1275

<211> 384

<212> DNA

<213> Homo sapiens

<400> 1275

```

nngctagcaa gtgcaagtac gagcaaaagt tatcagcaac agcgggagggc tgaacttctc
60
gtcgcacggc tagaggggga aatgcacgca cacagcgacc cgaccccgtc gccacaacca
120
cccgaggatg cagggttgat tgatgttgcc ctgaaagagg cgaagaaagc ctttgatgaa
180
ggcaaggctg atctaattga taaactcaat caggagatac ttcgcctggc aaacgaattc
240
ggtgcgctcg ggcttgaatc tattgagctt ggctccgacg cgaagatggc agtacgcaaa
300
ggcaatcaga aatcagcggt cagcaggctg actcccggtg aacgtctcag gctgcgcatt
360
gctacagcca tcgcgttggt acgc
384

```

<210> 1276

<211> 128

<212> PRT

<213> Homo sapiens

<400> 1276

Xaa Leu Ala Ser Ala Ser Thr Ser Lys Ser Tyr Gln Gln Gln Arg Glu

```

      1             5             10             15
Ala Glu Leu Leu Val Ala Arg Leu Glu Gly Glu Met His Ala His Ser
      20             25             30
Asp Pro Thr Pro Ser Pro Gln Pro Pro Glu Asp Ala Gly Leu Ile Asp
      35             40             45
Val Ala Leu Lys Glu Ala Lys Lys Ala Phe Asp Glu Gly Lys Val Asp
      50             55             60
Leu Met Asp Lys Leu Asn Gln Glu Ile Leu Arg Leu Ala Asn Glu Phe
      65             70             75             80
Gly Ala Leu Gly Leu Glu Ser Ile Glu Leu Gly Ser Asp Ala Lys Met
      85             90             95
Ala Val Arg Lys Gly Asn Gln Lys Ser Ala Phe Ser Arg Leu Thr Pro
      100             105             110
Gly Glu Arg Leu Arg Leu Arg Ile Ala Thr Ala Ile Ala Leu Leu Arg
      115             120             125

```

<210> 1277

<211> 392

<212> DNA

<213> Homo sapiens

<400> 1277

```

cagtttcagc cccgctgtgt gtccccaatt cctgtctctc ctaccagccg gattcagaac
60
ccagtggctt tcttcagctc tgttctgcct tctctccctg ccatcccacc cacaaatgcc
120
atggggctgc ctagaagtgc accatccatg ccatcccagg gattagcgaa gaaaaatata
180
aagtctctc aaccagtga tgaatgataac attcgtgaaa ctaagaacgc agtgattcga
240
gacttgggga aaaaaataac ttctcagtgt gtcagaccaa accagcagga gtacaaaatt
300
tcaagctttg agcagaggct gatgaatgaa atagagtttc gcttggaaag tactcctgtt
360
gatgaatcac atgatgaaat tcaacatgat gg
392

```

<210> 1278

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1278

```

Gln Phe Gln Pro Arg Cys Val Ser Pro Ile Pro Val Ser Pro Thr Ser
      1             5             10             15
Arg Ile Gln Asn Pro Val Ala Phe Leu Ser Ser Val Leu Pro Ser Leu
      20             25             30
Pro Ala Ile Pro Pro Thr Asn Ala Met Gly Leu Pro Arg Ser Ala Pro
      35             40             45
Ser Met Pro Ser Gln Gly Leu Ala Lys Lys Asn Thr Lys Ser Pro Gln
      50             55             60
Pro Val Asn Asp Asp Asn Ile Arg Glu Thr Lys Asn Ala Val Ile Arg
      65             70             75             80
Asp Leu Gly Lys Lys Ile Thr Phe Ser Asp Val Arg Pro Asn Gln Gln

```

85 90 95
 Glu Tyr Lys Ile Ser Ser Phe Glu Gln Arg Leu Met Asn Glu Ile Glu
 100 105 110
 Phe Arg Leu Glu Arg Thr Pro Val Asp Glu Ser His Asp Glu Ile Gln
 115 120 125
 His Asp
 130

<210> 1279
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 1279
 atggagtcgc agactctccg ccacatgac gaggacgact gcgccgacaa cggcatccca
 60
 ctcccccaacg tcaactccag gatcctctct aaggtcatcg agtactgcaa cagtcacgtc
 120
 cagcgcgcgcg ccaaaccgcg tgactccgct gcctccgagg gcggcgagga cctcaagagc
 180
 tgggacgcga agttcgtaaa ggtggaccag gctacgctct tcgacctcat cctggctgcc
 240
 aactatctga acatcaaggg attgctggac ctgacctgcc agacgggtgc tgacatg
 297

<210> 1280
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 1280
 Met Glu Ser Gln Thr Leu Arg His Met Ile Glu Asp Asp Cys Ala Asp
 1 5 10 15
 Asn Gly Ile Pro Leu Pro Asn Val Asn Ser Arg Ile Leu Ser Lys Val
 20 25 30
 Ile Glu Tyr Cys Asn Ser His Val His Ala Ala Ala Lys Pro Ala Asp
 35 40 45
 Ser Ala Ala Ser Glu Gly Gly Glu Asp Leu Lys Ser Trp Asp Ala Lys
 50 55 60
 Phe Val Lys Val Asp Gln Ala Thr Leu Phe Asp Leu Ile Leu Ala Ala
 65 70 75 80
 Asn Tyr Leu Asn Ile Lys Gly Leu Leu Asp Leu Thr Cys Gln Thr Gly
 85 90 95
 Ala Asp Met

<210> 1281
 <211> 515
 <212> DNA
 <213> Homo sapiens

<400> 1281
 acgcgtgaag ggggctttgg aggggatggc ttctggactg cacgatgggt gaacacagtt
 60

ttttaaactc ttttccacat ctgtataggt ttgaaaatta tcaacaactc atggggaggg
 120
 tggcgtgccca ggtcatgggt gcctggagcc cttctgagga gggccggctc aaccgaggac
 180
 gccctcccca ctaccaagta ggcactgcgg gcaggagtgc ccacccccac cccaaggaag
 240
 ttcagaacag gcaacaggag gagcctgact ccaacagagt tgggtgtcatc cggcgcacgc
 300
 ctaaggacgt cacaacacat caactctggg agcccaaggg ggtgtgtggt ccaactcaagg
 360
 ggaagatgat ccagaagctc tgctccctcc ctttgctttt gaagaacaca ggagtgcac
 420
 gtggggaatc taccggctta atttcttctt agtaacaggc atagtaggat caaaaaattt
 480
 ttgcttctaa tttttaaaaa cattcaatgt gtaca
 515

<210> 1282

<211> 135

<212> PRT

<213> Homo sapiens

<400> 1282

Met	Gly	Glu	His	Ser	Phe	Leu	Asn	Ser	Phe	Pro	His	Leu	Tyr	Arg	Phe
1				5					10					15	
Glu	Asn	Tyr	Gln	Gln	Leu	Met	Gly	Arg	Val	Ala	Cys	Gln	Val	Met	Ala
			20					25					30		
Ala	Trp	Ser	Pro	Ser	Glu	Glu	Gly	Arg	Leu	Asn	Arg	Gly	Arg	Pro	Pro
		35					40					45			
His	Tyr	Gln	Val	Gly	Thr	Ala	Gly	Arg	Ser	Arg	His	Pro	His	Pro	Lys
	50				55					60					
Glu	Val	Gln	Asn	Arg	Gln	Gln	Glu	Glu	Pro	Asp	Ser	Asn	Arg	Val	Gly
65				70					75					80	
Val	Ile	Arg	Arg	Ile	Ala	Lys	Asp	Val	Thr	Thr	His	Gln	Leu	Trp	Glu
			85					90					95		
Pro	Lys	Gly	Val	Cys	Gly	Pro	Leu	Lys	Gly	Lys	Met	Ile	Gln	Lys	Leu
			100				105						110		
Cys	Ser	Leu	Pro	Leu	Leu	Leu	Lys	Asn	Thr	Gly	Val	Thr	Arg	Gly	Glu
		115					120					125			
Ser	Thr	Gly	Leu	Ile	Ser	Ser									
		130				135									

<210> 1283

<211> 296

<212> DNA

<213> Homo sapiens

<400> 1283

gaattctctca caatgaactg cagtgtctgg aggaccagtt gggtagcctt actccgggtc
 60
 tccactgcag aacttataca tatatgcttt gtgcacacaa agaaaaacag cagcccaaaa
 120
 gaatccccgc tggggctctt aggagggagg aaagttccca caggtaactc actgggtaat
 180

tttaaagagc tcaggaaagg aaggaaggat ggctttttct cttgtgagtc aagacaaggt
240
cctgatgata accctcccag atcagaacgt aactttcaac ccacgagtc tgctcn
296

<210> 1284
<211> 94
<212> PRT
<213> Homo sapiens

<400> 1284
Met Asn Cys Ser Val Trp Arg Thr Ser Trp Val Ala Leu Leu Arg Val
1 5 10 15
Ser Thr Ala Glu Leu Ile His Ile Cys Phe Val His Thr Lys Lys Asn
20 25 30
Ser Ser Pro Lys Glu Ser Arg Leu Gly Leu Leu Gly Gly Arg Lys Val
35 40 45
Pro Thr Gly Asn Ser Leu Val Asn Phe Lys Glu Leu Arg Lys Gly Arg
50 55 60
Lys Asp Gly Phe Phe Ser Cys Glu Ser Arg Gln Gly Pro Asp Asp Asn
65 70 75 80
Pro Pro Arg Ser Glu Arg Asn Phe Gln Pro Thr Ser Ala Ala
85 90

<210> 1285
<211> 526
<212> DNA
<213> Homo sapiens

<400> 1285
gggcccttc ttacctgccc cttccccgtg ccaccaaccc gtagacaggg agggcaagca
60
gtgaaaggtc catctagagg aggtaaaaga cagggtgag ggaaaacgcc ttgtacagtc
120
aggatggcag atgtactctg tcagggaaga cagccccaca gaaaaggctc ggcttggcca
180
agaagcaaca aaagggattc tacacctcag accagggagg gggaatgtgt acaaagattg
240
gatttactaa attcagagcc acagactttc aggtacttcg gtgaagatca gtgctctttc
300
aaacccacac ttcagaggca ggctttaaaa cgcctgactt ctgtcagggc cacaggctgg
360
gctgcccaaa gtccttacgg ggctggggga tccgagagag gacttccac tagtccaaga
420
tgtggtgact agtttcaagc cagagattga ggagcagacc tgatgccctt tcgggccctt
480
gctaagaacc tgattcgagg aaaaggaagt gaagacagta acgcgt
526

<210> 1286
<211> 102
<212> PRT
<213> Homo sapiens

<400> 1286

```

Met Ala Asp Val Leu Cys Gln Gly Arg Gln Pro His Arg Lys Gly Ser
 1           5           10           15
Ala Trp Pro Arg Ser Asn Lys Arg Asp Ser Thr Pro Gln Thr Arg Glu
           20           25           30
Gly Glu Cys Val Gln Arg Leu Asp Leu Leu Asn Ser Glu Pro Gln Thr
           35           40           45
Phe Arg Tyr Phe Gly Glu Asp Gln Cys Ser Phe Lys Pro Thr Leu Gln
           50           55           60
Arg Gln Ala Leu Lys Arg Leu Thr Ser Val Arg Ala Thr Gly Trp Ala
65           70           75           80
Ala Gln Ser Ser Tyr Gly Ala Gly Gly Ser Glu Arg Gly Leu Pro Thr
           85           90           95
Ser Pro Arg Cys Gly Asp
           100

```

<210> 1287

<211> 333

<212> DNA

<213> Homo sapiens

<400> 1287

```

acgcgtgaag gggagaggca gctccagggt gagggaggtg catgaggaag cagagaggca
60
ggcgacagggc agcgtggctg gggctgggca ggccttcag tttgattgca gccagagggt
120
cagggtgagaa gaaggtacaa caagcaagga agggcccagg aagccactgg ggggtgttga
180
gccattgaat attctggatt ttaggacatt tctgtggctg actccactgc catcagagtt
240
catccacccc aactccagcc tgagagtgtt ggggcactgg gcactccgga attcttcaaa
300
gctctgatgc aacatgtccc caggggtgtct gac
333

```

<210> 1288

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1288

```

Met Leu His Gln Ser Phe Glu Glu Phe Arg Ser Ala Gln Cys Pro Ser
 1           5           10           15
Thr Leu Arg Leu Glu Leu Gly Trp Met Asn Ser Asp Gly Ser Gly Val
           20           25           30
Ser His Arg Asn Val Leu Lys Ser Arg Ile Phe Asn Gly Ser Asn Thr
           35           40           45
Pro Ser Gly Phe Leu Gly Pro Ser Leu Leu Val Val Pro Ser Ser His
           50           55           60
Leu Thr Ser Gly Leu Gln Ser Asn Trp Lys Ala Cys Pro Ala Pro Ala
65           70           75           80
Thr Leu Pro Val Ala Cys Leu Ser Ala Ser Ser Cys Thr Ser Leu His
           85           90           95
Leu Glu Leu Pro Leu Pro Phe Thr Arg

```

100

105

<210> 1289

<211> 336

<212> DNA

<213> Homo sapiens

<400> 1289

acgcgtgtct gtgtacaggt ggaaggggat gggatatgaga tgggtgcagcg tgtgcatggg
60
cacggcgat ggtgtgtgag tgcactcgtg tgccggagag ctgtaagctg ctggctgagt
120
cctgcacggg ggaggaggca aggtggcccc tgctgtggg cacagagccc accttccggt
180
ccagcccag gcccctttcc cagagcccc tccaagggg ccataccacc tgcattccca
240
agatggcgtg gggcgccct ggtgcaggag caggggacag tcaggaggc gtgtggcgga
300
cagtagcagc ccccagccc cctcccccc accggt
336

<210> 1290

<211> 89

<212> PRT

<213> Homo sapiens

<400> 1290

Met	Val	Cys	Glu	Cys	Thr	Arg	Val	Pro	Glu	Ser	Cys	Lys	Leu	Leu	Ala
1				5					10				15		
Glu	Ser	Cys	Thr	Val	Glu	Glu	Ala	Arg	Trp	Pro	Leu	Pro	Val	Gly	Thr
			20					25					30		
Glu	Pro	Thr	Phe	Arg	Ser	Ser	Pro	Arg	Pro	Leu	Ser	Gln	Ser	Pro	Leu
		35					40				45				
Pro	Arg	Gly	His	Thr	Thr	Cys	Ile	Pro	Lys	Met	Ala	Trp	Gly	Val	Pro
		50				55				60					
Gly	Ala	Gly	Ala	Gly	Asp	Ser	Gln	Gly	Gly	Val	Trp	Arg	Thr	Val	Ala
65				70					75					80	
Ala	Pro	Gln	Pro	Pro	Ser	Pro	His	Arg							
				85											

<210> 1291

<211> 379

<212> DNA

<213> Homo sapiens

<400> 1291

tggccatcca cctctgtcag ctgttccggc aaccattca gatcattgtg gtagtaacga
60
atcttctgca acggcccggc accgtccacg cgagccagag gttgatagcc ttcattccta
120
taaactgaca ggcttgtctg gctgtgttta tgctcctgca ataaccgcaa accatcccag
180
gtaaaccggg tttcccccaa cgataccca tcaactgcat gctcggtttt ttctatccga
240

cgccccagcg ggtcatatac catcctgacc acgctaccat cgtcattacg cacttcaacc
300
agccggcttt cagcgtcata cgcaaaccgc tgcacgccac gcttggcact gcgcttctcg
360
accatccgcc caaacgcgt
379

<210> 1292

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1292

Met	Val	Glu	Lys	Arg	Ser	Ala	Lys	Arg	Gly	Val	Gln	Arg	Phe	Ala	Tyr
1			5						10					15	
Asp	Ala	Glu	Ser	Arg	Leu	Val	Glu	Val	Arg	Asn	Asp	Asp	Gly	Ser	Val
			20						25				30		
Val	Arg	Met	Val	Tyr	Asp	Pro	Leu	Gly	Arg	Arg	Ile	Glu	Lys	Thr	Glu
		35					40					45			
His	Gly	Ser	Asp	Gly	Tyr	Pro	Leu	Gly	Glu	Thr	Arg	Phe	Thr	Trp	Asp
	50					55					60				
Gly	Leu	Arg	Leu	Leu	Gln	Glu	His	Lys	His	Ser	Gln	Thr	Ser	Leu	Tyr
65					70					75				80	
Val	Tyr	Glu	Asp	Glu	Gly	Tyr	Gln	Pro	Leu	Ala	Arg	Val	Asp	Gly	Ala
			85						90				95		
Gly	Pro	Leu	Gln	Lys	Ile	Arg	Tyr	Tyr	His	Asn	Asp	Leu	Asn	Gly	Leu
			100					105					110		
Pro	Glu	Gln	Leu	Thr	Glu	Val	Asp	Gly							
		115						120							

<210> 1293

<211> 340

<212> DNA

<213> Homo sapiens

<400> 1293

nngccggccg cccgagagct gttcgaggcg tgccgcaacg gggacgtgga acgagtcaag
60
aggctggtga cgcctgagaa ggtgaacagc cgcgacacgg cgggcaggaa atccaccccg
120
ctgcacttcg ccgcagggtt tgggcggaaa gacgtagtgt aatatttgct tcagaatggt
180
gcaaagtgtc aagcacgtga tgatgggggc cttattcctc ttcataatgc atgctctttt
240
ggtcagtctg aagtagtcaa tctccttttg cgacatggtg cagaccccaa tgcttgagat
300
aattggaatt atactoctag aggggtggagt gtgctcgcga
340

<210> 1294

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1294

Xaa Pro Ala Ala Arg Glu Leu Phe Glu Ala Cys Arg Asn Gly Asp Val
 1 5 10 15
 Glu Arg Val Lys Arg Leu Val Thr Pro Glu Lys Val Asn Ser Arg Asp
 20 25 30
 Thr Ala Gly Arg Lys Ser Thr Pro Leu His Phe Ala Ala Gly Phe Gly
 35 40 45
 Arg Lys Asp Val Val Glu Tyr Leu Leu Gln Asn Gly Ala Asn Val Gln
 50 55 60
 Ala Arg Asp Asp Gly Gly Leu Ile Pro Leu His Asn Ala Cys Ser Phe
 65 70 75 80
 Gly His Ala Glu Val Val Asn Leu Leu Leu Arg His Gly Ala Asp Pro
 85 90 95
 Asn Ala

<210> 1295

<211> 351

<212> DNA

<213> Homo sapiens.

<400> 1295

ggatcccgga gacctcgctc gogaacgtca cctcgctccag ggccgaggcg cggaacaccg
 60
 acgtgtcgat gccctcgccc tcgatgcagt cggtcagcgg tacgacggcg ccgcgaggag
 120
 cgaaggtgcc gatctggctg cgctcggcgt agaccagcga cggcggttcg cccgacgcca
 180
 cggaggagag gaactgctgg atgtcgaggt caccctcgat cagcttgacc ttggcgtcgc
 240
 cgagctctc cttcgcccgg tcgagccgca ccgtcgcgat ctgctcgccg gcaccgaagc
 300
 ccatcacctc gacctcgccg gagagcttcg ccccgctgtc gaaagacgcg t
 351

<210> 1296

<211> 75

<212> PRT

<213> Homo sapiens

<400> 1296

Gly Ser Arg Arg Pro Arg Arg Arg Thr Ser Pro Arg Pro Gly Pro Arg
 1 5 10 15
 Arg Gly Thr Pro Thr Cys Arg Cys Pro Arg Pro Arg Cys Ser Arg Ser
 20 25 30
 Ala Val Arg Arg Arg Arg Gly Arg Arg Arg Cys Arg Ser Gly Cys Ala
 35 40 45
 Arg Arg Arg Pro Ala Thr Ala Val Arg Pro Thr Pro Arg Arg Arg Gly
 50 55 60
 Thr Ala Gly Cys Arg Gly His Pro Arg Ser Ala
 65 70 75

<210> 1297

<211> 356

<212> DNA

<213> Homo sapiens

<400> 1297

gtgcaccggtg attccattg ccaccgactt cgagtaaact ccagtcccga ggacacgaga
60
gacaccagg cctcaggccc catgggcacg ctccacgcca cggctcctac cagagggaca
120
gatacactct acaaattctg gggcccacca caccaagaag acacggagga gccacaacaa
180
gaaggaccat acgaaatgca cccccaaagc aaccaaccaa tccaagaaaa aatacgtctc
240
agggttctgt gggccctctt gcatgggctg ccctgcccc ctgttctggc ctggctcaag
300
caccttacc cagcctgctc gaaagagccc tggctaccag agcagagcac tggcct
356

<210> 1298

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1298

Met	Gly	Thr	Leu	His	Ala	Thr	Ala	Pro	Thr	Arg	Gly	Thr	Asp	Thr	Leu
1				5				10					15		
Tyr	Lys	Ser	Arg	Gly	Pro	Pro	His	Gln	Glu	Asp	Thr	Glu	Glu	Pro	Thr
			20					25				30			
Lys	Glu	Gly	Pro	Tyr	Glu	Met	His	Pro	Gln	Ser	Asn	Gln	Pro	Ile	Gln
			35				40					45			
Glu	Lys	Ile	Arg	Leu	Arg	Val	Leu	Trp	Ala	Leu	Leu	His	Gly	Leu	Pro
	50					55				60					
Cys	Pro	Pro	Val	Leu	Ala	Trp	Leu	Lys	His	Leu	Thr	Pro	Ala	Cys	Ser
65				70					75					80	
Lys	Glu	Pro	Trp	Leu	Pro	Glu	Gln	Ser	Thr	Gly					
			85						90						

<210> 1299

<211> 307

<212> DNA

<213> Homo sapiens

<400> 1299

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120
tgtctttgcc atatggcaac tgagaatgat cttggctacc ttctccagcc cgggagtcgg
180
gagttttctg ggggtggggtc acgggtcttg cccggagtgc gccctggcaa aggcctgtgc
240
cagtgatcct ggagcggagc gaagtgttgc cgtgactctg cagccgcagt tcttagggct
300
tccttag
307

<210> 1300

<211> 90

<212> PRT

<213> Homo sapiens

<400> 1300

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Met Ala Ala Gly Leu Arg Leu Trp Trp Leu Leu Ala Gly Cys Leu Ser
 1          5          10          15
Ser Leu Pro Cys Gly Ser Leu His Arg Ala Ala Ser Cys Val Phe Ala
      20          25          30
Ile Trp Gln Leu Arg Met Ile Leu Ala Thr Phe Ser Ser Pro Gly Val
      35          40          45
Gly Ser Phe Leu Gly Trp Gly His Gly Ser Cys Pro Glu Phe Ala Leu
      50          55          60
Ala Lys Ala Cys Ala Ser Asp Pro Gly Ala Glu Arg Ser Val Ser Val
      65          70          75          80
Thr Leu Gln Pro Gln Phe Leu Gly Leu Pro
      85          90

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<210> 1301

<211> 408

<212> DNA

<213> Homo sapiens

<400> 1301

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ctgagcaagt taaaagaagt tcttgaattt tataacttta ttttgacaaa ctattataaa
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gttgagccta tttcctttga tgcagtatac gctgaagggt tggaaatggc tgagttcttg
120
cgccctatgg tgtcagatac gattacactt ttgcatgacc ttagaagggtc tggcgcaaac
180
atcatgtttg aaggcgcgca agggctcttg ttggatgttg atcatggtac ttaccggtat
240
gtgacttcat ctaatacgac tgcgggcgga gcgccagcgg gaacagggtt tggtcctttg
300
tacttagatt atgtattagg tatcactaag gcttatacga ctgcggttgg ttctggacct
360
ttccctactg agttgtttga cgaagatggt gagcgtcttg gtacgcgt
408

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<210> 1302

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1302

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Leu Ser Lys Leu Lys Glu Val Leu Glu Phe Tyr Asn Phe Ile Leu Thr
 1          5          10          15
Asn Tyr Tyr Lys Val Glu Pro Ile Ser Phe Asp Ala Val Tyr Ala Glu
      20          25          30
Gly Leu Glu Met Ala Glu Phe Leu Arg Pro Met Val Ser Asp Thr Ile
      35          40          45
Thr Leu Leu His Asp Leu Arg Arg Ser Gly Ala Asn Ile Met Phe Glu

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50		55		60											
Gly	Ala	Gln	Gly	Ser	Leu	Leu	Asp	Val	Asp	His	Gly	Thr	Tyr	Pro	Tyr
65					70					75					80
Val	Thr	Ser	Ser	Asn	Thr	Thr	Ala	Gly	Gly	Ala	Pro	Ala	Gly	Thr	Gly
				85						90				95	
Phe	Gly	Pro	Leu	Tyr	Leu	Asp	Tyr	Val	Leu	Gly	Ile	Thr	Lys	Ala	Tyr
			100					105					110		
Thr	Thr	Arg	Val	Gly	Ser	Gly	Pro	Phe	Pro	Thr	Glu	Leu	Phe	Asp	Glu
		115					120					125			
Asp	Gly	Glu	Arg	Leu	Gly	Thr	Arg								
130						135									

<210> 1303

<211> 1037

<212> DNA

<213> Homo sapiens

<400> 1303

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gccggggggg ggatgctatc taacatcttc atgttcaacc cagagaagaa acatcccgcc
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gtttgcctg gggccctctc atccacatc attttttcaa cccttcccca ncctttcnga
120
aatagggcca accccttaaa aancaaatnt tcanataaac ccttttccct ccaccctttt
180
cccatcccat cctttttccc tcacaaacac aaacaaaang cctctttcct tggcatttc
240
cactcctttt ggaagaaaca ggccctgttc cctccctgct caccacttca ccagctcag
300
ctggcacaaa aatactgcca ccacaccttc accctgcta gccaacctg gcagggcctc
360
ggagtagcct gccagctaaa atacgggttg ccagataac tgtgaatgtc agataagaat
420
cttctgggac aagtatgtcc catgccatat ttgggacata cttacactaa taaatttctg
480
tttatctgaa actcaaattt gcctgggcgt cctgtacttt tcttaactaa atttggtgcc
540
tctacacaca aggtccctgg ggtggggggg cacaggagca agccccctcc caggctgggt
600
ccctgccggc atctcccaca ggccaggact ggccaccag atggagcccg tgccaggcag
660
cggcgacag acggacaaag gctgctcagg agacactgca caccttcctc tttcttgtct
720
gggggctcaa gaatccagac gcccaacctc ccgagcgagc accaagacag gaagccaacc
780
tgcaatgccc agcccactgc gaccacaggg ctctgccggg gtccctgccg aaccagggt
840
tccggtccag aagccaggga taaatgccgc ttctcctata gggacggtca gagtagagag
900
ggggaggcct acagtctcac ctgcaggag aggaagtcct cggggcgggc acgtgggggg
960
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1020
tggatcccac gcgtggc
1037

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<210> 1304
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 1304
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 Gly Asp Thr Ala His Leu Pro Leu Ser Cys Leu Gly Ala Gln Glu Ser
 20 25 30
 Arg Arg Pro Pro Pro Arg Ala Ser Thr Lys Thr Gly Ser Gln Pro Ala
 35 40 45
 Met Pro Ser Pro Leu Arg Pro Gln Gly Ser Ala Gly Val Leu Pro Glu
 50 55 60
 Pro Arg Val Pro Val Gln Lys Pro Gly Ile Asn Ala Ala Ser Pro Ile
 65 70 75 80
 Gly Thr Val Arg Val Glu Arg Gly Arg Pro Thr Val Ser Pro Ala Gly
 85 90 95
 Arg Gly Ser Pro Arg Gly Gly His Val Gly Gly Leu Thr Ala Pro Ser
 100 105 110
 Thr Pro Gly His Ser Asp His Gly Leu His Thr Gln Lys Gln Ser Gly
 115 120 125
 Ser His Ala Trp
 130

<210> 1305
 <211> 775
 <212> DNA
 <213> Homo sapiens

<400> 1305
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 60
 ccggccccgc tgcgggtgga gagacgtcgg gccctctacg ggtcctggta cgagtttttc
 120
 ccgcgctctc aggggtgctta tgtcgatgcg gacggtcact gggtttcagg tactttcgac
 180
 acctcctggg agcgcttgga cgccgcgct gcgatgggat ttgacgttgt ttacctgccc
 240
 gcgatccatc ccatgggcca agccttccgc aagggaagg acaacaccct gacccaggt
 300
 ccggacgacg cgggatcgcc gtgggccatc ggatcgctcg atggcgcca tgacaccatt
 360
 caccgcgacc taggcacctt cgacgacctc gaccgtttcg tggccacgc tcatgacctc
 420
 ggcatggagg tggccctaga ttttccttg caagcctcac cagaccaccc gtgggtacac
 480
 cagcaccgga agtggttcac gaccgcggt gatggcacca tcgcctatgc agaaaattca
 540
 cccaaaaagt atcaggacat ctaccgacg aacttcgaca atgacctga cggtatctac
 600
 caggaatgct tgcggctgct ggagttatgg atctccaag gcgtgacgat tttccgcgtc
 660

gataatccac ataccaagcc tctgaatttc tgggcctggc tcatggaaca ggttcacgt
 720
 cgtcaccccg aggtcatctt cctggcagag gccttcaccc gtcccagat gatca
 775

<210> 1306
 <211> 258
 <212> PRT
 <213> Homo sapiens

<400> 1306
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 Ser Pro Thr Leu Pro Ala Pro Leu Arg Val Glu Arg Arg Arg Ala Leu
 20 25 30
 Tyr Gly Ser Trp Tyr Glu Phe Phe Pro Arg Ser Gln Gly Ala Tyr Val
 35 40 45
 Asp Ala Asp Gly His Trp Val Ser Gly Thr Phe Asp Thr Ser Trp Glu
 50 55 60
 Arg Leu Asp Ala Ala Ala Met Gly Phe Asp Val Val Tyr Leu Pro
 65 70 75 80
 Ala Ile His Pro Met Gly Gln Ala Phe Arg Lys Gly Lys Asp Asn Thr
 85 90 95
 Leu Thr Pro Gly Pro Asp Asp Pro Gly Ser Pro Trp Ala Ile Gly Ser
 100 105 110
 Ser Asp Gly Gly His Asp Thr Ile His Pro Asp Leu Gly Thr Phe Asp
 115 120 125
 Asp Leu Asp Arg Phe Val Ala His Ala His Asp Leu Gly Met Glu Val
 130 135 140
 Ala Leu Asp Phe Ala Leu Gln Ala Ser Pro Asp His Pro Trp Val His
 145 150 155 160
 Gln His Pro Glu Trp Phe Thr Thr Arg Val Asp Gly Thr Ile Ala Tyr
 165 170 175
 Ala Glu Asn Ser Pro Lys Lys Tyr Gln Asp Ile Tyr Pro Ile Asn Phe
 180 185 190
 Asp Asn Asp Pro Asp Gly Ile Tyr Gln Glu Cys Leu Arg Leu Leu Glu
 195 200 205
 Leu Trp Ile Ser His Gly Val Thr Ile Phe Arg Val Asp Asn Pro His
 210 215 220
 Thr Lys Pro Leu Asn Phe Trp Ala Trp Leu Met Glu Gln Val His Arg
 225 230 235 240
 Arg His Pro Glu Val Ile Phe Leu Ala Glu Ala Phe Thr Arg Pro Glu
 245 250 255
 Met Ile

<210> 1307
 <211> 624
 <212> DNA
 <213> Homo sapiens

<400> 1307
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atgctgggca catgcggtca gggccctgtg cctgagccgt ggaactccac agccattcca
 120
 catgttcagt cccacaccct gagggccaagg caccctgagt ccctgaggga gcaaggccct
 180
 gccacccgag gctgccgtg cagaggcaaa cagcccgag caaggcccgg caaccccgag
 240
 ctgtggctgc atggggcaaa cacagcctgg cctgaggctg ccggccagtc ggggtggcca
 300
 taggctaacg agaagccagg gcctccctcc cactgggct ttccacaaaa acctgactaa
 360
 tgtccaggga cagccaaagg ccttgaggtc agctgggtgg aacacctttc ccctaccatc
 420
 ccgagatatt gtcttcttgg atggagtttt caaagccctc catgtggagg tctcgggatg
 480
 agaggcctcg gctgagctct gtgcagagga gcaggaagct gcagaatggg caccgcctc
 540
 cctcccagca cctccagtcg ctgccacgcc ccaagctcct gagctgctct gcccaagacc
 600
 tcccccaacc ttggtctgac gcgt
 624

<210> 1308

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1308

Met	Ala	Thr	Pro	Thr	Gly	Arg	Gln	Pro	Gln	Ala	Arg	Leu	Cys	Leu	Pro
1				5				10					15		
His	Ala	Ala	Thr	Ala	Trp	Gly	Cys	Arg	Ala	Leu	Leu	Gly	Ala	Val	Cys
			20					25					30		
Leu	Cys	Ser	Gly	Ser	Leu	Gly	Trp	Gln	Gly	Leu	Ala	Pro	Ser	Gly	Thr
		35				40						45			
Arg	Gly	Ala	Leu	Ala	Ser	Gly	Cys	Gly	Thr	Glu	His	Val	Glu	Trp	Leu
	50					55				60					
Trp	Ser	Ser	Thr	Ala	Gln	Ala	Gln	Gly	Pro	Asp	Arg	Met	Cys	Pro	Ala
65					70				75				80		
Ser	Leu	Thr	Ser	Pro	Glu	Val	Gly	Cys	Arg	Glu	Pro	Gly	Ala	Trp	His
				85				90					95		
Ser	Pro	Pro	Ala												
				100											

<210> 1309

<211> 563

<212> DNA

<213> Homo sapiens

<400> 1309

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 tacctgactg tgtgtatcgg caaaaagagc ctgaaatggg tgccgctgtt cggtcagttg
 120
 ttctggctgg cgggcaatgt gttgattgac cggggcaacg cgcacaaggc gcgccgctca
 180

atgctcacca ccacccacac cttgcagcat aaagacacat cgatctgggt atttgccgaa
 240
 ggtacacgca acttcggtga aaccttgctg cggttcaaga aagggtgcgtt ccagatggcg
 300
 attgcccagc gtgtgccgat cgtgcagggtg tgtgtcagca cgtatgtgaa gcacatgaag
 360
 ctcaatcggt gggacagtgg cgatatttta attcgctcgt tgccgccaat tcctacgacc
 420
 ggactgacgt tggatgacat gccacgggtg atggagacct gccgtcaaca aatgcgcgag
 480
 tgcattgagg caatggaccg cgagctggaa atcgccctt gtaggaacga attggctcgc
 540
 gaagggcggt aacgactacg cgt
 563

<210> 1310

<211> 183

<212> PRT

<213> Homo sapiens

<400> 1310

Xaa	Ile	Ile	Ala	Asn	His	Gln	Ser	Asn	Tyr	Asp	Leu	Phe	Val	Phe	Gly
1				5					10					15	
Thr	Gly	Val	Pro	Tyr	Arg	Thr	Val	Cys	Ile	Gly	Lys	Lys	Ser	Leu	Lys
			20					25					30		
Trp	Val	Pro	Leu	Phe	Gly	Gln	Leu	Phe	Trp	Leu	Ala	Gly	Asn	Val	Leu
	35						40					45			
Ile	Asp	Arg	Gly	Asn	Ala	His	Lys	Ala	Arg	Arg	Ser	Met	Leu	Thr	Thr
	50					55					60				
Thr	His	Thr	Leu	Gln	His	Lys	Asp	Thr	Ser	Ile	Trp	Val	Phe	Ala	Glu
65					70					75					80
Gly	Thr	Arg	Asn	Phe	Gly	Glu	Thr	Leu	Leu	Pro	Phe	Lys	Lys	Gly	Ala
			85						90					95	
Phe	Gln	Met	Ala	Ile	Ala	Ala	Gly	Val	Pro	Ile	Val	Gln	Val	Cys	Val
		100						105					110		
Ser	Thr	Tyr	Val	Lys	His	Met	Lys	Leu	Asn	Arg	Trp	Asp	Ser	Gly	Asp
		115					120					125			
Ile	Leu	Ile	Arg	Ser	Leu	Pro	Pro	Ile	Pro	Thr	Thr	Gly	Leu	Thr	Leu
	130					135						140			
Asp	Asp	Met	Pro	Arg	Leu	Met	Glu	Thr	Cys	Arg	Gln	Gln	Met	Arg	Glu
145					150					155					160
Cys	Ile	Glu	Ala	Met	Asp	Arg	Glu	Leu	Glu	Ile	Val	Pro	Cys	Arg	Asn
				165					170					175	
Glu	Leu	Ala	Arg	Glu	Gly	Arg									
				180											

<210> 1311

<211> 674

<212> DNA

<213> Homo sapiens

<400> 1311

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tccagggcgc acccggcaca caccgtcggg ctgacggatg atctgagctg ggtcaagcgc
 120
 atctcccggc cgccgaaagc cggaatacca cgaggcgctg gatcggcgat tctgttcaca
 180
 gggctgaccc ccgatcagga tcgactgacc aacgagtggg cgcaggcgca cgggttgggg
 240
 gaattttatg tcatggcccc ccgaatcctc ggtgatgtcc cgctgccaac gatcaccatc
 300
 gtcgcgaccg tcaccttcat cgtgttgctg gccatcatgg cgggcctgtt ggcgaaggag
 360
 gagagagccg ccaacagtga tctggtgacc agcctcaaac gcacggatt gggcaggcgt
 420
 tgggtggacc aggtcatcct tgtggagggt gctaccacaa tgctggccgc cctgatatgc
 480
 ggggtgatct cctcggttgt cgcggtgtgg ctcacaggca ggatcctgtc gggagccttg
 540
 gacctgcttg gggccgcgtg gtgggtcttc ggtgcgttgg ccgccgggat gttcgggtga
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 tccttgctgg gggccgccat ccacgcctt taccacttcg acatgagagc tacctgatcc
 660
 acgacccgt gaca
 674

<210> 1312

<211> 196

<212> PRT

<213> Homo sapiens

<400> 1312

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1			5					10					15		
Arg	Thr	Glu	Asp	Pro	Pro	Arg	Gly	Pro	Lys	Gln	Val	Gln	Gly	Ser	Arg
		20						25				30			
Gln	Asp	Pro	Ala	Cys	Glu	Pro	His	Arg	Asp	Asn	Arg	Gly	Asp	His	Pro
		35					40					45			
Ala	Tyr	Gln	Gly	Gly	Gln	His	Cys	Gly	Ser	His	Leu	His	Lys	Asp	Asp
	50					55					60				
Leu	Val	His	Pro	Thr	Pro	Ala	Gln	Ser	Asp	Ala	Phe	Glu	Ala	Gly	His
65					70					75				80	
Gln	Ile	Thr	Val	Gly	Gly	Ser	Leu	Leu	Leu	Arg	Gln	Gln	Ala	Arg	His
			85					90						95	
Asp	Gly	Arg	Gln	His	Asp	Glu	Gly	Asp	Gly	Arg	Asp	Asp	Gly	Asp	Arg
			100					105					110		
Trp	Gln	Arg	Asp	Ile	Thr	Glu	Asp	Ser	Gly	Gly	His	Asp	Ile	Lys	Phe
		115					120					125			
Pro	Gln	Pro	Val	Arg	Leu	Arg	Pro	Leu	Val	Gly	Gln	Ser	Ile	Leu	Ile
		130				135					140				
Gly	Gly	Gln	Pro	Cys	Glu	Gln	Asn	Arg	Arg	Ser	Ser	Ala	Ser	Trp	Tyr
145					150					155				160	
Ser	Gly	Phe	Arg	Arg	Pro	Gly	Asp	Ala	Leu	Asp	Pro	Ala	Gln	Ile	Ile
			165					170						175	
Arg	Gln	Pro	Asp	Gly	Val	Cys	Arg	Val	Gly	Pro	Gly	Gly	Ile	Ile	Gly
			180					185						190	
Gln	Val	Pro	Ala												

195

<210> 1313
 <211> 367
 <212> DNA
 <213> Homo sapiens

<400> 1313
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 gtggtggcag ctacgtagg acagtcacga gatttaggag ataaaataga aggtggcggc
 120
 aaggaaggga gaggacagag cctggtgtga ctctgggtt tctggtgtgt atagctggtg
 180
 gacagtgggtg tctttgccaa gaggggagcc ctggaagagg agaggtttgc agggcaggtg
 240
 ctgagtccgg ttttgacac gctgaatttg aggtatctgt cagatatgag acccaaaagg
 300
 tgagggcggg gaagtggatg tgcaggccct gagctctggg aggggtctgg gtatgctgtg
 360
 gtcatga
 367

<210> 1314
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1314
 Met Thr Thr Ala Tyr Pro Asp Pro Ser Gln Ser Ser Gly Pro Ala His
 1 5 10 15
 Pro Leu Pro Arg Pro His Leu Leu Gly Leu Ile Ser Asp Arg Tyr Leu
 20 25 30
 Lys Phe Ser Val Ser Lys Thr Gly Leu Ser Thr Cys Pro Ala Asn Leu
 35 40 45
 Ser Ser Ser Arg Ala Pro Leu Leu Ala Lys Thr Pro Leu Ser Thr Ser
 50 55 60
 Tyr Thr His Gln Lys Pro Arg Ser His Thr Arg Leu Cys Pro Leu Pro
 65 70 75 80
 Ser Leu Pro Pro Pro Ser Ile Leu Ser Pro Lys Ser Arg Asp Cys Pro
 85 90 95
 Thr Leu Ala Ala Thr Thr Ala Ala Ala Pro Ala Ala Pro Pro Ala Pro
 100 105 110
 Ala Thr Trp Arg Gly Cys Met Asp Ile
 115 120

<210> 1315
 <211> 5245
 <212> DNA
 <213> Homo sapiens

<400> 1315
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gacatggatg atgcatctaa gcttcttcag gattatgata ttcgaactgg caacaccagg
120
gaagctttga gtccttgctc aagtactgta agtaccaagt ctccagccagg cagcagtgtc
180
tcttctagtt ctggagttaa aatgaccagc tttgctgaac aaaaattcag gaaactgaat
240
cataccgatg gaaaaagtag tggaagcagt tctcaaaaaa ctacaccaga aggctctgaa
300
cttaatatte ctcatgtggt tgcttgggca caaattccag aagaaacagg gcttccacag
360
ggacgggaca ctaccagct gttggcctct gaaatggtgc atcttaggat gaaactagaa
420
gaaaagaggc gtgctataga agcccagaaa aagaaaatgg aagctgcttt taccaaacag
480
agacagaaaa tgggaaggac agcattcctt actgtagtga aaaagaaagg ggatgggata
540
tctcctctac gagaggaagc ggcgggtgca gaagatgaga aagtatatac tgatcgagca
600
aaagaaaagg aatcacaaaa aactgatgga caaaggagca agtcactggc agatataaaa
660
gagagcatgg agaactctca agccaaatgg ctaaagtctc caactacacc tattgatcct
720
gagaagcagt ggaacctggc aagcccctca gaagaaactt taaatgaagg agagatttta
780
gaatatacca aatccattga aaagttaa atcatccctgc attttctaca acaagaaatg
840
caacgcttgt cacttcagca ggagatgtta atgcagatga gagagcaaca atcttgggtg
900
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1020
tctccacagt cttctaacag gaaaagtgca tctttttctg ttaaaagtca aaggactcct
1080
aggccaaatg agttaaaaat aacacctttg aatcgaacct tgacacctcc tcggtctgtg
1140
gatagccttc ctcggttaag gaggttttca ccaagtcaag ttcctattca aactagggtca
1200
tttgtatgtt ttggggatga tggagaacct cagttaaagg aatccaaacc taaagaggaa
1260
gttaaaaagg aggaattgga atccaaaggg actttggaac agcgtggaca taatccagaa
1320
gaaaaggaaa tcaaaccctt tgagtcaaca gtctctgaag tcctatcact gcctgtcaca
1380
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1440
aaaccgctt tcccaccac tgctocaaaa aatgttaatc tgattgaagt ttccctctca
1500
gatttgaaac cccctgaaaa ggctgatgta cctgttgaaa aatatgatgg agaaagtgat
1560
aaagaacaat ttgatgatga ccagaaagta tgctgtggat tcttttttaa ggatgatcaa
1620
aaagcagaaa atgatatggc aatgaaacgg gcagctttgt tggagaaaag attaagaagg
1680

gaaaaggaaa ctcagctccg gaaacaacag ttggaagcag aaatggagca taagaaggag
1740
gaaacaaggc gtaaaactga ggaagaacgt cagaagaaag aagatgagag agcacgcaga
1800
gaatttatta ggcaagaata tatgaggcgg aaacaactga aactaatgga agatatggat
1860
acagtaatta aaccccgctc tcaagtagta aaacaaaaaa aacagcgacc aaaatctatt
1920
cacagagatc atattgaatc ccccaaaaaca ccaataaagg gtcctccagt ctctagcctt
1980
tctttggcat cgctgaacac ggggtgataac gagagtgtac attcaggcaa gaggacgcca
2040
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<211> 856

<212> PRT

<213> Homo sapiens

<400> 1316

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			20					25					30		
Gly	Asn	Thr	Arg	Glu	Ala	Leu	Ser	Pro	Cys	Pro	Ser	Thr	Val	Ser	Thr
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Lys	Ser	Gln	Pro	Gly	Ser	Ser	Ala	Ser	Ser	Ser	Ser	Gly	Val	Lys	Met
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Thr	Ser	Phe	Ala	Glu	Gln	Lys	Phe	Arg	Lys	Leu	Asn	His	Thr	Asp	Gly
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Lys	Ser	Ser	Gly	Ser	Ser	Ser	Gln	Lys	Thr	Thr	Pro	Glu	Gly	Ser	Glu
			85						90					95	
Leu	Asn	Ile	Pro	His	Val	Val	Ala	Trp	Ala	Gln	Ile	Pro	Glu	Glu	Thr
			100					105						110	
Gly	Leu	Pro	Gln	Gly	Arg	Asp	Thr	Thr	Gln	Leu	Leu	Ala	Ser	Glu	Met
			115				120					125			
Val	His	Leu	Arg	Met	Lys	Leu	Glu	Glu	Lys	Arg	Arg	Ala	Ile	Glu	Ala
			130				135					140			
Gln	Lys	Lys	Lys	Met	Glu	Ala	Ala	Phe	Thr	Lys	Gln	Arg	Gln	Lys	Met
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				165					170					175	
Ser	Pro	Leu	Arg	Glu	Glu	Ala	Ala	Gly	Ala	Glu	Asp	Glu	Lys	Val	Tyr
			180					185					190		
Thr	Asp	Arg	Ala	Lys	Glu	Lys	Glu	Ser	Gln	Lys	Thr	Asp	Gly	Gln	Arg
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Ser	Lys	Ser	Leu	Ala	Asp	Ile	Lys	Glu	Ser	Met	Glu	Asn	Pro	Gln	Ala
			210				215				220				
Lys	Trp	Leu	Lys	Ser	Pro	Thr	Thr	Pro	Ile	Asp	Pro	Glu	Lys	Gln	Trp
225					230					235				240	
Asn	Leu	Ala	Ser	Pro	Ser	Glu	Glu	Thr	Leu	Asn	Glu	Gly	Glu	Ile	Leu
				245					250					255	
Glu	Tyr	Thr	Lys	Ser	Ile	Glu	Lys	Leu	Asn	Ser	Ser	Leu	His	Phe	Leu
			260					265					270		
Gln	Gln	Glu	Met	Gln	Arg	Leu	Ser	Leu	Gln	Gln	Glu	Met	Leu	Met	Gln

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290		295		300
Gln Lys Gln Ile Arg Asp Phe Lys Pro Ser Lys Gln Ala Gly Leu Ser				
305		310		315
Ser Ala Ile Ala Pro Phe Ser Ser Asp Ser Pro Arg Pro Thr His Pro				
	325		330	335
Ser Pro Gln Ser Ser Asn Arg Lys Ser Ala Ser Phe Ser Val Lys Ser				
	340		345	350
Gln Arg Thr Pro Arg Pro Asn Glu Leu Lys Ile Thr Pro Leu Asn Arg				
	355		360	365
Thr Leu Thr Pro Pro Arg Ser Val Asp Ser Leu Pro Arg Leu Arg Arg				
	370		375	380
Phe Ser Pro Ser Gln Val Pro Ile Gln Thr Arg Ser Phe Val Cys Phe				
385		390		395
Gly Asp Asp Gly Glu Pro Gln Leu Lys Glu Ser Lys Pro Lys Glu Glu				
	405		410	415
Val Lys Lys Glu Glu Leu Glu Ser Lys Gly Thr Leu Glu Gln Arg Gly				
	420		425	430
His Asn Pro Glu Glu Lys Glu Ile Lys Pro Phe Glu Ser Thr Val Ser				
	435		440	445
Glu Val Leu Ser Leu Pro Val Thr Glu Thr Val Cys Leu Thr Pro Asn				
	450		455	460
Glu Asp Gln Leu Asn Gln Pro Thr Glu Pro Pro Pro Lys Pro Val Phe				
465		470		475
Pro Pro Thr Ala Pro Lys Asn Val Asn Leu Ile Glu Val Ser Leu Ser				
	485		490	495
Asp Leu Lys Pro Pro Glu Lys Ala Asp Val Pro Val Glu Lys Tyr Asp				
	500		505	510
Gly Glu Ser Asp Lys Glu Gln Phe Asp Asp Asp Gln Lys Val Cys Cys				
	515		520	525
Gly Phe Phe Phe Lys Asp Asp Gln Lys Ala Glu Asn Asp Met Ala Met				
	530		535	540
Lys Arg Ala Ala Leu Leu Glu Lys Arg Leu Arg Arg Glu Lys Glu Thr				
545		550		555
Gln Leu Arg Lys Gln Gln Leu Glu Ala Glu Met Glu His Lys Lys Glu				
	565		570	575
Glu Thr Arg Arg Lys Thr Glu Glu Glu Arg Gln Lys Lys Glu Asp Glu				
	580		585	590
Arg Ala Arg Arg Glu Phe Ile Arg Gln Glu Tyr Met Arg Arg Lys Gln				
	595		600	605
Leu Lys Leu Met Glu Asp Met Asp Thr Val Ile Lys Pro Arg Pro Gln				
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Val Val Lys Gln Lys Lys Gln Arg Pro Lys Ser Ile His Arg Asp His				
625		630		635
Ile Glu Ser Pro Lys Thr Pro Ile Lys Gly Pro Pro Val Ser Ser Leu				
	645		650	655
Ser Leu Ala Ser Leu Asn Thr Gly Asp Asn Glu Ser Val His Ser Gly				
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Lys Arg Thr Pro Arg Ser Glu Ser Val Glu Gly Phe Leu Ser Pro Ser				
	675		680	685
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Lys Glu Pro Ser Ala Lys Ser Asn Lys His Ile Ile Gln Asn Ala Leu
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          740          745          750
Ile Leu Glu Glu Met Glu Lys Ser Asp Ala Asn Asn Phe Leu Ile Leu
          755          760          765
Phe Arg Asp Ser Gly Cys Gln Phe Arg Ser Leu Tyr Thr Tyr Cys Pro
          770          775          780
Glu Thr Glu Glu Ile Asn Lys Leu Thr Gly Ile Gly Pro Lys Ser Ile
785          790          795          800
Thr Lys Lys Met Ile Glu Gly Leu Tyr Lys Tyr Asn Ser Asp Arg Lys
          805          810          815
Gln Phe Ser His Ile Pro Ala Lys Thr Leu Ser Ala Ser Val Asp Ala
          820          825          830
Ile Thr Ile His Ser His Leu Trp Gln Thr Lys Arg Pro Val Thr Pro
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<210> 1317

<211> 1123

<212> DNA

<213> Homo sapiens

<400> 1317

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<211> 285

<212> PRT

<213> Homo sapiens

<400> 1318

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			20					25					30		
Ala	Ala	Tyr	Thr	Gln	Thr	Glu	Pro	Glu	Gly	Ser	Gln	Pro	Ser	Thr	Met
		35					40					45			
Asp	Ala	Thr	Ala	Val	Ala	Gly	Ile	Glu	Thr	Lys	Lys	Glu	Lys	Glu	Asp
		50				55					60				
Leu	Cys	Leu	Leu	Lys	Lys	Glu	Glu	Lys	Glu	Glu	Pro	Val	Ala	Pro	Glu
65				70					75					80	
Leu	Ala	Thr	Thr	Val	Pro	Glu	Ser	Ala	Glu	Pro	Glu	Ala	Glu	Ala	Asp
			85					90					95		
Gly	Glu	Glu	Leu	Asp	Gly	Ser	Asp	Met	Ser	Ala	Ile	Ile	Tyr	Glu	Ile
			100					105					110		
Pro	Lys	Glu	Pro	Glu	Lys	Arg	Arg	Ser	Lys	Arg	Ser	Arg	Val	Met	
		115				120					125				
Asp	Ala	Asp	Gly	Leu	Leu	Glu	Met	Phe	His	Cys	Pro	Tyr	Glu	Gly	Cys
		130				135					140				
Ser	Gln	Val	Tyr	Val	Ala	Leu	Ser	Ser	Phe	Gln	Asn	His	Val	Asn	Leu
145				150					155					160	
Val	His	Arg	Lys	Gly	Lys	Thr	Lys	Val	Cys	Pro	His	Pro	Gly	Cys	Gly
			165					170					175		
Lys	Lys	Phe	Tyr	Leu	Ser	Asn	His	Leu	Arg	Arg	His	Met	Ile	Ile	His
		180				185						190			
Ser	Gly	Val	Arg	Glu	Phe	Thr	Cys	Glu	Thr	Cys	Gly	Lys	Ser	Phe	Lys
		195				200					205				
Arg	Lys	Asn	His	Leu	Glu	Val	His	Arg	Arg	Thr	His	Thr	Gly	Glu	Thr
		210				215					220				
Pro	Leu	Gln	Cys	Val	Ile	Cys	Gly	Tyr	Gln	Cys	Arg	Gln	Arg	Ala	Ser
225				230					235					240	
Leu	Asn	Trp	His	Met	Lys	Lys	His	Thr	Ala	Glu	Val	Gln	Tyr	Asn	Phe
			245					250					255		
Thr	Cys	Asp	Ala	Cys	Gly	Lys	Arg	Phe	Glu	Lys	Leu	Asp	Ser	Val	Lys
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 <211> 538
 <212> DNA
 <213> Homo sapiens

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<210> 1320
 <211> 169
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Glu Ser Gly Val Asp Ala Lys Ser Glu Ser Ser Trp Gly Gly Thr Gln
 50 55 60
 Lys Pro Trp Asp Gly Val Cys Met Gly Met Cys Arg Glu Ala Ala Thr
 65 70 75 80
 Met Gly Leu Gly Leu Pro Phe Ser Pro Ser Cys Pro Pro Pro Pro Ser
 85 90 95
 Pro Ser Leu Leu Pro Ser Phe Trp Lys Pro Ser Thr Gly Gly Asn Thr
 100 105 110
 His Arg Trp Asp Ala Gly Ile Arg Glu Ala His Arg Ser Cys His Ala
 115 120 125
 Ala Gly Val Cys Leu Ile Gln Glu Arg Gly His Ala Pro Arg Gly Val
 130 135 140
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<210> 1321

<211> 1292

<212> DNA

<213> Homo sapiens

<400> 1321

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<210> 1322

<211> 317

<212> PRT

<213> Homo sapiens

<400> 1322

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Pro Gly His Val Ile Val Lys Lys Ile Tyr Asn Asn Asn Val Leu Leu
      35           40           45
Gly Val Asn Gly Ser Gly Thr Glu Met Val Val Asn Ala Arg Gly Ile
      50           55           60
Ala Tyr Gly Arg His Arg Gly Glu Ile Val Asp Ala Ser Ser Ala Gln
      65           70           75           80
Arg Tyr Val Ala Glu Gly Ala Tyr Arg Thr Thr Ala Ile Ala Ser Leu
      85           90           95
Leu Thr Asn Ala Thr His Thr Glu Val Arg Val Ala Gln Ala Ile Val
      100          105          110
Glu Leu Ala Arg Glu Glu Leu Gly Thr Pro His Ala Arg Arg Met Met
      115          120          125
Leu Pro Ile Leu Asp His Leu Val Ala Ala Val His Arg Ala Lys Gln
      130          135          140
Gly Ala Val Ile Asp Phe Pro Leu Glu Trp Glu Val Arg Gln Leu Tyr
      145          150          155          160
Pro Asp Glu Ala Glu Leu Gly Arg Arg Ala Val Glu Ile Val Asp Gly
      165          170          175
Ala Leu Glu Ile His Leu Gln Pro Glu Glu Trp Val Ala Phe Ser Leu
      180          185          190
His Phe Ile Asn Gln Arg Trp Asp Ser Arg Asp Val Ser Arg Thr Met
      195          200          205
Ser Met Thr Gln Thr Ile Cys Asp Val Phe Thr Glu Leu Glu Asp Leu
      210          215          220
Trp His Val Glu Ile Asp Arg Ser Ser Met Ser Ala Ser Arg Phe Val
      225          230          235          240
Thr His Leu Arg Tyr Leu Phe Ala Arg Ala Ser Asp Asn Lys Gln Leu
      245          250          255
Ser His Val Asp Leu Asp Ile Val Gly Leu Met Ser Asp Arg Tyr Pro
      260          265          270
Glu Ala Thr Leu Ala Ala Ser Gln Val Ala Glu His Ile Ser Lys Ala
      275          280          285
Ile Gly Asn Asp Leu Thr Glu Ala Glu Ile Asn Tyr Ile Ala Leu His
      290          295          300
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      305          310          315

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<210> 1323

<211> 306

<212> DNA

<213> Homo sapiens

<400> 1323

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 caacgtgatg ctgaactcaa ccgcccatta tttgagtttt tgggtttaag catcgggtgtg
 240
 atttattcga tgcaaagcc tgctgagaaa gcacaagctt atttagcaga cattaacttac
 300
 ggtacc
 306

<210> 1324

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1324

Arg Val Met Gly Met Arg His Tyr Asp Val Gln Leu Ile Gly Gly Ile
 1 5 10 15
 Thr Leu His Glu Gly Lys Ile Ala Glu Met Arg Thr Gly Glu Gly Lys
 20 25 30
 Thr Leu Met Gly Thr Leu Ala Cys Tyr Leu Asn Ala Leu Ser Gly Gln
 35 40 45
 Gly Val His Val Ile Thr Val Asn Asp Tyr Leu Ala Gln Arg Asp Ala
 50 55 60
 Glu Leu Asn Arg Pro Leu Phe Glu Phe Leu Gly Leu Ser Ile Gly Val
 65 70 75 80
 Ile Tyr Ser Met Gln Met Pro Ala Glu Lys Ala Gln Ala Tyr Leu Ala
 85 90 95
 Asp Ile Thr Tyr Gly Thr
 100

<210> 1325

<211> 391

<212> DNA

<213> Homo sapiens

<400> 1325

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 attgtcgccg catgttccgt ctccgtcat gccggaagct ggccagagaa accgatcacg
 120
 atggtcgtgc cgtttcccg cggaggcggc accgatctcg tggcgcgctc gatccagccg
 180
 cttttgcagc gcgaactcgg acaaccggtg gtgatcgaca accgcagcgg cgcaggcggc
 240
 acgtcgggt ccagcttcgt ggcgcgggcc gttgccgacg gctacacggc tggcgtggtc
 300
 accacgagca cccacgcggt aagcgtcgcg ctctatcccc ggctggccta caaccgaca
 360
 gcggactttg catacgcggg cttcatcggc n
 391

<210> 1326

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1326

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Val His Met Gly Pro Leu Ala Asn Pro Thr Arg Gly Leu Arg Arg Ala
 1           5           10           15
Ile Leu Ala Ala Ile Val Ala Ala Cys Ser Val Ser Ala His Ala Gly
          20           25           30
Ser Trp Pro Glu Lys Pro Ile Thr Met Val Val Pro Phe Pro Ala Gly
          35           40           45
Gly Gly Thr Asp Leu Val Ala Arg Ser Ile Gln Pro Leu Leu Gln Arg
          50           55           60
Glu Leu Gly Gln Pro Val Val Ile Asp Asn Arg Ser Gly Ala Gly Gly
65           70           75           80
Thr Leu Gly Ser Ser Phe Val Ala Arg Ala Val Ala Asp Gly Tyr Thr
          85           90           95
Ala Gly Val Val Thr Thr Ser Thr His Ala Val Ser Val Ala Leu Tyr
          100          105          110
Pro Arg Leu Ala Tyr Asn Pro Thr Ala Asp Phe Ala Tyr Ala Gly Phe
          115          120          125
Ile Gly
          130

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<210> 1327

<211> 324

<212> DNA

<213> Homo sapiens

<400> 1327

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nnacgcgtga ttccggaact gcagcagttc gagcagtcgc atggacagag cgacgggagc
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tactggctat ggttcgagct gctgtggcga gactatttcc gctttctgca tcttcggcat
120
ggcgctcggc tgtaccgcgc acgcggcctc gcaaattgagg tacggcacgc ggagcgccca
180
gatgtgcagg gcttcgagcg ctggcgctcg gcacgcaccg gcgagccgct cgtcgatgcc
240
gcgatgcgcg agctggagac caccggctac ctcagcaaca ggctcagaca ggtggtcgcg
300
agctacctcg tgcacgagct ggga
324

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<210> 1328

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1328

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Xaa Arg Val Ile Ser Glu Leu Gln Gln Phe Glu Gln Ser His Gly Gln
 1           5           10           15
Ser Asp Gly Ser Tyr Trp Leu Trp Phe Glu Leu Leu Trp Arg Asp Tyr
          20           25           30
Phe Arg Phe Leu His Leu Arg His Gly Ala Arg Leu Tyr Arg Ala Arg
          35           40           45
Gly Leu Ala Asn Glu Val Arg His Ala Glu Arg Pro Asp Val Gln Gly

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50 55 60
 Phe Glu Arg Trp Arg Arg Ala Ser Thr Gly Glu Pro Leu Val Asp Ala
 65 70 75 80
 Ala Met Arg Glu Leu Glu Thr Thr Gly Tyr Leu Ser Asn Arg Leu Arg
 85 90 95
 Gln Val Val Ala Ser Tyr Leu Val His Glu Leu Gly
 100 105

<210> 1329

<211> 438

<212> DNA

<213> Homo sapiens

<400> 1329

ngtgcacgct tagcattaga tttagcttcc agtggcaaaa ctacgtcggt gatttcaagc
 60
 ggcgatatcg gcatttacgc gatggcgacc ctggtgtttg aactgctgga tagacaactc
 120
 cagggccttg aagaccatcc tgaatgggta gatgttgaaa tcgatgtggt acctggcacc
 180
 tctgcaatgc aagctggtgc aagtcgtatt ggtgcgatgt taggtcatga cttttgtacg
 240
 gtgagtttgt ctgatttatt aacccttgg gaaactatta ataaacgtat tcatagtgc
 300
 ggtgaggggg attttgttat ctctttttat aaccctgttt ctaagaaacg tgattggcag
 360
 ctttaaccacg cgctgatgt attattgaaa taccgtccag catcaacgcc agttttatta
 420
 ggtcgtcagt tgacgcgt
 438

<210> 1330

<211> 146

<212> PRT

<213> Homo sapiens

<400> 1330

Xaa Ala Arg Leu Ala Leu Asp Leu Ala Ser Ser Gly Lys Thr Thr Ser
 1 5 10 15
 Leu Ile Ser Ser Gly Asp Ile Gly Ile Tyr Ala Met Ala Thr Leu Val
 20 25 30
 Phe Glu Leu Leu Asp Arg Gln Leu Gln Gly Leu Glu Asp His Pro Glu
 35 40 45
 Trp Leu Asp Val Glu Ile Asp Val Val Pro Gly Ile Ser Ala Met Gln
 50 55 60
 Ala Gly Ala Ser Arg Ile Gly Ala Met Leu Gly His Asp Phe Cys Thr
 65 70 75 80
 Val Ser Leu Ser Asp Leu Leu Thr Pro Trp Glu Thr Ile Asn Lys Arg
 85 90 95
 Ile His Ser Ala Gly Glu Gly Asp Phe Val Ile Ser Phe Tyr Asn Pro
 100 105 110
 Val Ser Lys Lys Arg Asp Trp Gln Leu Asn His Ala Arg Asp Val Leu
 115 120 125
 Leu Lys Tyr Arg Pro Ala Ser Thr Pro Val Leu Leu Gly Arg Gln Leu

130 135 140
 Thr Arg
 145
 <210> 1331
 <211> 453
 <212> DNA
 <213> Homo sapiens
 <400> 1331
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 catctttctg cggcatcgg acgcatcgaa tccggtcacg ccaacggcgg caagacgacc
 120
 tcggtgggta cgaacgtcac cccgatcctc ggccccatcc tcgacggacg gctggcaggg
 180
 aacgaagtca ttccgggacac cgacaagggc aatcgacggc gacccactca cgaccgcggc
 240
 gtcggggccga tgcagttcat tccggccacc tgggccggat atgccagcga cggcaacggg
 300
 gacggaatca aggaccccaa caacgtcttc gatgcggcac tctcggcagc gaagtacctc
 360
 tgcagcggcg gactcaacct gcgcgatgtc gcccaggaga ccaaagctgt tctgcgatac
 420
 aacaactcgg ccgcttacgc agcaaactgtg atc
 453

<210> 1332
 <211> 151
 <212> PRT
 <213> Homo sapiens

<400> 1332
 Ala Tyr Arg Ser Ala Glu Leu Val Met Met Thr Glu Ala Pro Gly Cys
 1 5 10 15
 Gly Ile Pro Trp His Leu Leu Ala Gly Ile Gly Arg Ile Glu Ser Gly
 20 25 30
 His Ala Asn Gly Gly Lys Thr Thr Ser Val Gly Thr Asn Val Thr Pro
 35 40 45
 Ile Leu Gly Pro Ile Leu Asp Gly Arg Leu Ala Gly Asn Glu Val Ile
 50 55 60
 Arg Asp Thr Asp Lys Gly Asn Arg Arg Arg Pro Thr His Asp Arg Ala
 65 70 75 80
 Val Gly Pro Met Gln Phe Ile Pro Ala Thr Trp Ala Gly Tyr Ala Ser
 85 90 95
 Asp Gly Asn Gly Asp Gly Ile Lys Asp Pro Asn Asn Val Phe Asp Ala
 100 105 110
 Ala Leu Ser Ala Ala Lys Tyr Leu Cys Ser Gly Gly Leu Asn Leu Arg
 115 120 125
 Asp Val Ala Gln Glu Thr Lys Ala Val Leu Arg Tyr Asn Asn Ser Ala
 130 135 140
 Ala Tyr Ala Ala Asn Val Ile
 145 150

<210> 1333
 <211> 540
 <212> DNA
 <213> Homo sapiens

<400> 1333
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 60
 ggcacagctc gtcggtcaag atgggtctag tgctgctcgt atggcggcgg aggcacccgc
 120
 gcgaagggct aaagcggatg gactaagcca gcttgtcatc gatgtcaatg gagacgccgt
 180
 cagcgtcgcg acggaaatca cccggcctac tcgtctatta gcccttattg gactaaccga
 240
 agtacacggc cgggcgagcg aaatgtgtat tttgctggct cgctgaggcc gttgcagcga
 300
 tacaatgatg aggtgtctaa gtattttccg gtccaccggc agaaccgcga gcagcgttct
 360
 ctcaatcaga tcgtcgacat cctgcaccat ggcggtctta tcgcctaccc gacagacacg
 420
 ggttatgcct tcggtgcccg gntaggaat aaggatgccg tggaccggat tcgcaaactt
 480
 cgccagttat ttgacaagca tcacttcacc ctggatcatga gccagtttgc gcaggttggc
 540

<210> 1334
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 1334
 Val His Pro Glu Asn Pro Gln Gln Arg Ser Leu Asn Gln Ile Val Asp
 1 5 10 15
 Ile Leu His His Gly Gly Leu Ile Ala Tyr Pro Thr Asp Thr Gly Tyr
 20 25 30
 Ala Phe Gly Ala Arg Xaa Gly Asn Lys Asp Ala Val Asp Arg Ile Arg
 35 40 45
 Lys Leu Arg Gln Leu Phe Asp Lys His His Phe Thr Leu Val Met Ser
 50 55 60
 Gln Phe Ala Gln Val Gly
 65 70

<210> 1335
 <211> 748
 <212> DNA
 <213> Homo sapiens

<400> 1335
 nctctcatat tttttttccc tattcctatc cccctctct cgcaccgcgt gaagcgttct
 60
 gtgaatgcc aagaagaagc tcgtgaggtc ctcatcagg cctccgggta ccgtggtcag
 120
 cgctcgcgcc tgtaccgcaa ggccaaggag cagaccctcc attcggccac ttattcgttc
 180

cgtgaccgtc gtgctaagaa gggtagcttc cgctcgctgt ggatccagcg catcaatgct
 240
 gcttcccgtg cccagggcat gacctacaac cgtttcatca acggtctgaa gaacgctggc
 300
 gtcgaggtcg accgcaagat gctcgctgag cttgccgtct ccgacattaa cgccttcaac
 360
 agcctgggtcg aggtcgctaa ggctagccag ccgcagaacg ctgctgcctg agatggccat
 420
 gactggcggg ccgaacgacg actatttggg atgggatcgc atctcgaagg ggtcattgcg
 480
 ttcggcccgt cgtctttcat ctccggcggg acgcgatgag tccgggctgt tcttggtaga
 540
 aggtgcgcag gcagttcgtg aagccctagc atggccgggt aaagtcaatt tgttggaac
 600
 ctccgaccca gctcgcatg ctgagcatgt cgaggtggct acatgctggt gcgttcgggt
 660
 cgtggtgctc actgacgagg atgtcaatgc gctttctgat accgtcacca gtcaggggat
 720
 ctccgcggtg tctcggcagg ttacgcgt
 748

<210> 1336

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1336

Xaa	Leu	Ile	Leu	Phe	Phe	Pro	Ile	Pro	Ile	Pro	Pro	Leu	Ser	Asp	Arg
1			5					10						15	
Val	Lys	Arg	Ser	Val	Asn	Ala	Lys	Lys	Lys	Arg	Arg	Glu	Val	Leu	Asp
			20					25						30	
Gln	Ala	Ser	Gly	Tyr	Arg	Gly	Gln	Arg	Ser	Arg	Leu	Tyr	Arg	Lys	Ala
			35				40					45			
Lys	Glu	Gln	Thr	Leu	His	Ser	Ala	Thr	Tyr	Ser	Phe	Arg	Asp	Arg	Arg
			50				55				60				
Ala	Lys	Lys	Gly	Asp	Phe	Arg	Ser	Leu	Trp	Ile	Gln	Arg	Ile	Asn	Ala
65					70					75				80	
Ala	Ser	Arg	Ala	Gln	Gly	Met	Thr	Tyr	Asn	Arg	Phe	Ile	Asn	Gly	Leu
				85					90					95	
Lys	Asn	Ala	Gly	Val	Glu	Val	Asp	Arg	Lys	Met	Leu	Ala	Glu	Leu	Ala
			100					105					110		
Val	Ser	Asp	Ile	Asn	Ala	Phe	Asn	Ser	Leu	Val	Glu	Val	Ala	Lys	Ala
			115				120						125		
Ser	Gln	Pro	Gln	Asn	Ala	Ala	Ala								
			130				135								

<210> 1337

<211> 364

<212> DNA

<213> Homo sapiens

<400> 1337

acgcgtgagg ccaggccact gggcaccgcc gttagccagg gcagcctcct tcagtggtea
 60

aggcagactc agctcatggg cgagcatgtc agtgaagggc acagcaaggc tcacgagtgg
 120
 gcctcttgcc tcatggtcag tgtgggtcag tgctttcgct gtatgagact acagggtttc
 180
 tctgcctcac catgggggac gattgggtct gggtcacttc ctgctgtggg acctgtcctg
 240
 ggcaactgcag gatgtggggc agggctccta cgtgccagct accagatgcc agcagcaccc
 300
 ccagaagtga caaccacaac catctccagg tgttgccagt gtcccctggg ggtcagagtg
 360
 gccc
 364

<210> 1338

<211> 96

<212> PRT

<213> Homo sapiens

<400> 1338

Met	Gly	Glu	His	Val	Ser	Glu	Gly	His	Ser	Lys	Ala	His	Glu	Trp	Ala
1				5				10					15		
Ser	Cys	Leu	Met	Val	Ser	Val	Gly	Gln	Cys	Phe	Arg	Cys	Met	Arg	Leu
		20					25					30			
Gln	Gly	Phe	Ser	Ala	Ser	Pro	Trp	Gly	Thr	Ile	Gly	Ser	Gly	Ser	Leu
	35					40				45					
Pro	Ala	Val	Gly	Pro	Val	Leu	Gly	Thr	Ala	Gly	Cys	Gly	Ala	Gly	Leu
	50				55				60						
Leu	Arg	Ala	Ser	Tyr	Gln	Met	Pro	Ala	Ala	Pro	Pro	Glu	Val	Thr	Thr
65				70				75				80			
Thr	Thr	Ile	Ser	Arg	Cys	Cys	Gln	Cys	Pro	Leu	Gly	Val	Arg	Val	Ala
			85					90				95			

<210> 1339

<211> 653

<212> DNA

<213> Homo sapiens

<400> 1339

cgcggtgtct tcaacatcga cgaaaagcag tgcattgacc tggcgacccg tgggtactgag
 60
 tgggtcgtca ggtacgccga caagtacctc ggcgacgttg agttcggcta cgagtactct
 120
 ccggagatgt ttagccagac ccgcacggac ttcgctatcg acgtctgtca ctccgtgatg
 180
 gacgtgtggc agccggggcc aggcctgtag attatcctta atctgccggc taccgtcgag
 240
 atgagtactc cgaacaccta cgccgaccaa atcgagtact tctgccgcaa tatccgtgat
 300
 cgtgagcacg tgtgcgtctc tttgcacccg cacaatgac gtggcacggc gatcgcgccc
 360
 gccgagttcg cgcagatggc gggcgccgat cgcgtcgagg gctgtttctt tggccccggc
 420
 gagcgccccg gcaccgtcga cctggtcacc ctgggcatga acctcgtcag ccaggagatt
 480

gacgccggta tcgacttctc cgacatgccc aagatccgcc gcaccgtcga gtactgcacc
 540
 tgtctgccag taccggcccc ccagccctac tccggcgatc tggctctcac cgccttctcc
 600
 ggttcccacc aggacgccat caagaagggt ctggaagacc tggcccggcg cgc
 653

<210> 1340

<211> 217

<212> PRT

<213> Homo sapiens

<400> 1340

Arg	Val	Val	Phe	Asn	Ile	Asp	Glu	Lys	Gln	Cys	Ile	Asp	Leu	Ala	His
1				5					10					15	
Arg	Gly	Thr	Glu	Trp	Val	Val	Arg	Tyr	Ala	Asp	Lys	Tyr	Leu	Gly	Asp
			20					25					30		
Val	Glu	Phe	Gly	Tyr	Glu	Tyr	Ser	Pro	Glu	Met	Phe	Ser	Gln	Thr	Arg
		35					40					45			
Thr	Asp	Phe	Ala	Ile	Asp	Val	Cys	His	Ser	Val	Met	Asp	Val	Trp	Gln
	50					55					60				
Pro	Gly	Pro	Gly	Arg	Glu	Ile	Ile	Leu	Asn	Leu	Pro	Ala	Thr	Val	Glu
65				70					75					80	
Met	Ser	Thr	Pro	Asn	Thr	Tyr	Ala	Asp	Gln	Ile	Glu	Tyr	Phe	Cys	Arg
				85					90					95	
Asn	Ile	Arg	Asp	Arg	Glu	His	Val	Cys	Val	Ser	Leu	His	Pro	His	Asn
			100						105				110		
Asp	Arg	Gly	Thr	Ala	Ile	Ala	Ala	Ala	Glu	Phe	Ala	Gln	Met	Ala	Gly
		115					120					125			
Ala	Asp	Arg	Val	Glu	Gly	Cys	Phe	Phe	Gly	Pro	Gly	Glu	Arg	Pro	Gly
	130					135					140				
Thr	Val	Asp	Leu	Val	Thr	Leu	Gly	Met	Asn	Leu	Val	Ser	Gln	Gly	Val
145				150						155				160	
Asp	Ala	Gly	Ile	Asp	Phe	Ser	Asp	Met	Pro	Lys	Ile	Arg	Arg	Thr	Val
			165						170					175	
Glu	Tyr	Cys	Thr	Cys	Leu	Pro	Val	Pro	Ala	Arg	Gln	Pro	Tyr	Ser	Gly
			180						185				190		
Asp	Leu	Val	Phe	Thr	Ala	Phe	Ser	Gly	Ser	His	Gln	Asp	Ala	Ile	Lys
	195						200					205			
Lys	Gly	Leu	Glu	Asp	Leu	Ala	Arg	Arg							
	210					215									

<210> 1341

<211> 666

<212> DNA

<213> Homo sapiens

<400> 1341

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 gcaaagtttc ttgccttgct ttgatcatat tttcacaact ggattcccaa cagaagtgtg
 120
 gcaatctgta atagaaaagt tggcaaagaa aggattatgg cattcatttc tgcttctgtc
 180

agcaaaaaaa gaccgattac caagaaatat tcatgtccca gagttatcac tgaaaagtct
 240
 ctttgagaaa tacgttttca ttggacttta tgagaagatg gaacaagtgc ccaagtttagt
 300
 ccagtggctc atctccattg gtgcaagtgt tgagactata ggaccgtatc cccttcatgc
 360
 cctcatgcga ctctgtatcc aagccagaga aaaccatctt ttccggtggt taatggatca
 420
 caagcccagag tggaaaggcc gcattaacca gaaggatggg gatggctgca ctgtcctgca
 480
 cgtcgtcgct gccactccc caggatacct cgtaaagcga caaacagagg atgtgcagat
 540
 gctcctgcgc tttggggcag atcccacttt gctggatcga cagtctcggt ctgttggtga
 600
 tgtcctgaag aggaataaga acttcaaagc catcgagaaa atcaacagtc acttagaaaa
 660
 gctagc
 666

<210> 1342

<211> 209

<212> PRT

<213> Homo sapiens

<400> 1342

Met	Ser	Ser	Asp	Ser	Ile	Val	Leu	Gln	Ser	Phe	Leu	Pro	Cys	Phe	Asp
1				5					10					15	
His	Ile	Phe	Thr	Thr	Gly	Phe	Pro	Thr	Glu	Val	Trp	Gln	Ser	Val	Ile
			20					25					30		
Glu	Lys	Leu	Ala	Lys	Lys	Gly	Leu	Trp	His	Ser	Phe	Leu	Leu	Leu	Ser
		35					40					45			
Ala	Lys	Lys	Asp	Arg	Leu	Pro	Arg	Asn	Ile	His	Val	Pro	Glu	Leu	Ser
	50					55					60				
Leu	Lys	Ser	Leu	Phe	Glu	Lys	Tyr	Val	Phe	Ile	Gly	Leu	Tyr	Glu	Lys
65				70					75					80	
Met	Glu	Gln	Val	Pro	Lys	Leu	Val	Gln	Trp	Leu	Ile	Ser	Ile	Gly	Ala
			85					90					95		
Ser	Val	Glu	Thr	Ile	Gly	Pro	Tyr	Pro	Leu	His	Ala	Leu	Met	Arg	Leu
			100					105					110		
Cys	Ile	Gln	Ala	Arg	Glu	Asn	His	Leu	Phe	Arg	Trp	Leu	Met	Asp	His
		115				120						125			
Lys	Pro	Glu	Trp	Lys	Gly	Arg	Ile	Asn	Gln	Lys	Asp	Gly	Asp	Gly	Cys
	130					135					140				
Thr	Val	Leu	His	Val	Val	Ala	Ala	His	Ser	Pro	Gly	Tyr	Leu	Val	Lys
145				150					155					160	
Arg	Gln	Thr	Glu	Asp	Val	Gln	Met	Leu	Leu	Arg	Phe	Gly	Ala	Asp	Pro
			165					170					175		
Thr	Leu	Leu	Asp	Arg	Gln	Ser	Arg	Ser	Val	Val	Asp	Val	Leu	Lys	Arg
			180				185					190			
Asn	Lys	Asn	Phe	Lys	Ala	Ile	Glu	Lys	Ile	Asn	Ser	His	Leu	Glu	Lys
		195					200					205			
Leu															

<210> 1343
 <211> 270
 <212> DNA
 <213> Homo sapiens

<400> 1343
 ccggaatgt gccgagttct cctgacgcac gaagtgatgt gtagtcgatg ctgcgaaaag
 60
 aaaagctgtg gaaaccgaaa tgagactcca tcggaccag tcataattga cagattcttt
 120
 ttaaaatttt tcctcaagtg caatcagaat tgtttgaaaa cagcaggaaa cccaaggac
 180
 atgagacggt ttcaggttgt gttgtcaaca acggtgaatg tggatggaca cgtcctggct
 240
 gttcttgaca acatgtttgt tcataacaac
 270

<210> 1344
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 1344
 Pro Glu Met Cys Arg Val Leu Leu Thr His Glu Val Met Cys Ser Arg
 1 5 10 15
 Cys Cys Glu Lys Lys Ser Cys Gly Asn Arg Asn Glu Thr Pro Ser Asp
 20 25 30
 Pro Val Ile Ile Asp Arg Phe Phe Leu Lys Phe Phe Leu Lys Cys Asn
 35 40 45
 Gln Asn Cys Leu Lys Thr Ala Gly Asn Pro Arg Asp Met Arg Arg Phe
 50 55 60
 Gln Val Val Leu Ser Thr Thr Val Asn Val Asp Gly His Val Leu Ala
 65 70 75 80
 Val Ser Asp Asn Met Phe Val His Asn Asn
 85 90

<210> 1345
 <211> 402
 <212> DNA
 <213> Homo sapiens

<400> 1345
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 agcggcaccg acaacaccga cttctacgac cggaccaagg cggacaaccg tctcacctac
 120
 cgccagacgg gcgtcgtcac gccctatgcc ggcatcgtct acgacctgaa tgacatctgg
 180
 tcggtgtaca ccagctacac caagatctac aagccgcaga acagcaagga cgccgaccgc
 240
 aagttgctcg atccgattga aggtgacacc tacgaagccg ggctcaaggc agcggttttc
 300
 gacggccgcc tgaacgccag ttttgccgca ttccgcatcg aacaggacaa cgtcgcacag
 360

tacgtttccg ggtttgagac cgactcgtgt atcgccatt gc
402

<210> 1346

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1346

Thr Arg Leu Lys Pro Thr Asp Asp Leu Ser Val Ile Leu Gly Thr Arg
1 5 10 15
Val Ser Asn Phe Ser Gly Thr Asp Asn Thr Asp Phe Tyr Asp Pro Thr
20 25 30
Lys Ala Asp Asn Arg Leu Thr Tyr Arg Gln Thr Gly Val Val Thr Pro
35 40 45
Tyr Ala Gly Ile Val Tyr Asp Leu Asn Asp Ile Trp Ser Val Tyr Thr
50 55 60
Ser Tyr Thr Lys Ile Tyr Lys Pro Gln Asn Ser Lys Asp Ala Asp Arg
65 70 75 80
Lys Leu Leu Asp Pro Ile Glu Gly Asp Thr Tyr Glu Ala Gly Leu Lys
85 90 95
Ala Ala Phe Phe Asp Gly Arg Leu Asn Ala Ser Phe Ala Ala Phe Arg
100 105 110
Ile Glu Gln Asp Asn Val Ala Gln Tyr Val Ser Gly Phe Glu Thr Asp
115 120 125
Ser Cys Ile Ala His Cys
130

<210> 1347

<211> 415

<212> DNA

<213> Homo sapiens

<400> 1347

naccaccttc tgggcaggct ctcattcttt cattccaaga agcatttatt aaagactggc
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120
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<210> 1348

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1348

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 20 25 30
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 35 40 45
 Ala Leu Phe Ser Arg Leu Ala Pro Pro Ser Lys Met Glu Phe Leu Lys
 50 55 60
 Ser Lys Val Leu Gln Leu Phe Leu Ile Phe Tyr Pro Gln Pro Leu Ala
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 Gly Phe Pro Arg Pro Ser Gln Ser Leu Ile Asn Ala Ser Trp Asn Glu
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 Arg Met Arg Ala Cys Pro Glu Gly Gly
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<210> 1349

<211> 924

<212> DNA

<213> Homo sapiens

<400> 1349

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 <211> 209
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Val Thr Lys Val Asp Gly Val Asp Asp Leu Pro Gln Ala Val Ala Asn
 50 55 60
 Ala Tyr Ala Tyr Asp Asp Met Val Val Val Glu Glu Phe Ile Val Gly
 65 70 75 80
 Asn Glu Leu Ala Ile Gly Met Ile Thr Thr Ser Glu Gly Thr Arg Val
 85 90 95
 Leu Pro Ala Val Glu Ile Arg Pro Val Gly Gly Val Tyr Asp Tyr Ser
 100 105 110
 Ala Met Tyr Thr Gly Gly Glu Thr Arg Leu Thr Ala Pro Ala Asp Ile
 115 120 125
 Ser Asp Thr Ala Ala Gln Thr Ala Thr Ala Met Ala Arg Val Val Gln
 130 135 140
 Lys Glu Leu Asp Phe Ser Gly Ile Ser Arg Val Asp Ala Ile Val Asp
 145 150 155 160
 Glu Ser Gly Arg Pro Val Phe Leu Glu Ala Gly Ala Ala Pro Gly Met
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 Thr Ala Thr Ser Leu Val Pro Val Ala Met Lys Ala Ala Gly Leu Asp
 180 185 190
 Leu Gly Glu Val Cys Ser Arg Leu Val Asp Asp Val Ala Arg Asn His
 195 200 205
 Gly

<210> 1351
 <211> 398
 <212> DNA
 <213> Homo sapiens

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<210> 1352

<211> 70

<212> PRT

<213> Homo sapiens

<400> 1352

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Leu His Pro Gly Leu Leu Ile Val Asp His Ile His Phe Gln Tyr Asn
35 40 45
Gly Phe Leu Ile Arg Gly Pro Leu Tyr Arg Leu Gly Ala Arg Thr Asp
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Ala Ser Ala Leu Phe Leu
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<210> 1353

<211> 480

<212> DNA

<213> Homo sapiens

<400> 1353

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<210> 1354

<211> 160

<212> PRT

<213> Homo sapiens

<400> 1354

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Val Arg Gly Ile Gly Gln Pro Arg Gly Asn Met Leu Leu Val Gly Ile

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<210> 1355
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<212> DNA
<213> Homo sapiens
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420
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480
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540
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840
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960

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 1063

<210> 1356
 <211> 244
 <212> PRT
 <213> Homo sapiens

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 Cys Asp Arg Cys Cys Pro Gly Phe Asn Gln Gln Pro Trp Lys Pro Ala
 35 40 45
 Thr Ala Asn Ser Ala Asn Glu Cys Gln Ser Cys Asn Cys Tyr Gly His
 50 55 60
 Ala Thr Asp Cys Tyr Tyr Asp Pro Glu Val Asp Arg Arg Arg Ala Ser
 65 70 75 80
 Gln Ser Leu Asp Gly Thr Tyr Gln Gly Gly Gly Val Cys Ile Asp Cys
 85 90 95
 Gln His His Thr Ala Gly Val Asn Cys Glu Arg Cys Leu Pro Gly Phe
 100 105 110
 Tyr Arg Ser Pro Asn His Pro Leu Asp Ser Pro His Val Cys Arg Arg
 115 120 125
 Cys Asn Cys Glu Ser Asp Phe Thr Asp Gly Thr Cys Glu Asp Leu Thr
 130 135 140
 Gly Arg Cys Tyr Cys Arg Pro Asn Phe Ser Gly Glu Arg Cys Asp Val
 145 150 155 160
 Cys Ala Glu Gly Phe Thr Gly Phe Pro Ser Cys Tyr Pro Thr Pro Ser
 165 170 175
 Ser Ser Asn Asp Thr Arg Glu Gln Val Leu Pro Ala Gly Gln Ile Val
 180 185 190
 Asn Cys Asp Cys Ser Ala Ala Gly Thr Gln Gly Asn Ala Cys Arg Lys
 195 200 205
 Asp Pro Arg Val Gly Arg Cys Phe Ala Asn Pro Asn Phe Gln Gly Thr
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 His Cys Glu Leu Cys Ala Pro Gly Phe Tyr Gly Pro Gly Cys Pro Gly
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 Ser Leu His Ala

<210> 1357
 <211> 663
 <212> DNA
 <213> Homo sapiens

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 ctg
 663

<210> 1358

<211> 221

<212> PRT

<213> Homo sapiens

<400> 1358

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			20					25					30	Arg
Cys	Gly	Phe	Gly	Thr	Glu	Val	Glu	Phe	Asn	Thr	Pro	Val	Leu	Pro
		35					40					45		Val
Gly	Gly	Val	Arg	Pro	Val	Ile	Leu	Gln	Arg	Pro	Gly	Trp	Cys	Pro
		50				55					60			Gly
Val	Phe	Val	Gly	Leu	Pro	Asn	His	His	Leu	Asp	Gly	Val	Ala	Met
65					70					75				80
Cys	Glu	Leu	Leu	Ala	Ala	Val	Phe	Cys	Ala	Arg	Ala	Cys	Leu	Ala
			85						90				95	Trp
Leu	Gln	Glu	Ser	Leu	Ala	His	Arg	Ala	Ser	Ala	Ser	Val	Lys	Ser
			100					105					110	Gln
Leu	Arg	Arg	Asp	Ile	Leu	Gln	Ala	Arg	Leu	Ser	Arg	Pro	Thr	Asp
			115				120					125		Ala
Thr	Met	Pro	Ser	Arg	Thr	Leu	Ile	Ser	Leu	Met	Thr	Thr	Gly	Leu
			130			135					140			Asp
Ala	Leu	Asp	Gly	Tyr	Tyr	Ser	Lys	Tyr	Leu	Pro	Gln	Leu	Val	Leu
145				150						155				160
Val	Ile	Val	Pro	Ala	Val	Leu	Ala	Thr	Ala	Ile	Gly	Leu	Asn	Asp
			165					170					175	Leu
Thr	Ser	Leu	Val	Ile	Val	Val	Val	Thr	Ile	Pro	Leu	Ile	Pro	Val
			180					185					190	Phe
Met	Ala	Leu	Ile	Gly	Trp	Arg	Thr	Glu	Ala	Ala	Val	Ala	Lys	Arg
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210

215

220

<210> 1359

<211> 423

<212> DNA

<213> Homo sapiens

<400> 1359

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<212> PRT

<213> Homo sapiens

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			20					25					30		
Asp	Val	Phe	Tyr	Pro	Leu	Trp	Glu	Asp	Asp	Tyr	Val	Val	Ala	Met	Pro
		35					40					45			
Val	Gly	Tyr	Trp	Leu	Ala	Asp	Tyr	Thr	Ser	Leu	Ser	Ile	Lys	Gln	Ile
	50					55					60				
Asp	Lys	Gln	Pro	Phe	Val	Ser	Arg	Thr	Pro	Cys	Asp	Ile	Leu	Glu	Ser
65				70						75				80	
Trp	Asn	Phe	Ile	Met	Gln	Lys	Gln	Gly	Leu	Ser	Thr	Asp	Val	Arg	Ala
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<211> 5300

<212> DNA

<213> Homo sapiens

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4800
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4860
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4920

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 4980
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 5040
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 5280
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 5300

<210> 1362

<211> 1587

<212> PRT

<213> Homo sapiens

<400> 1362

Met	Ala	Ala	Ala	Ala	Leu	Leu	Leu	Gly	Leu	Ala	Leu	Leu	Ala	Pro	Arg
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Ala	Ala	Gly	Ala	Gly	Met	Gly	Ala	Cys	Tyr	Asp	Gly	Ala	Gly	Arg	Pro
			20					25					30		
Gln	Arg	Cys	Leu	Pro	Val	Phe	Glu	Asn	Ala	Ala	Phe	Gly	Arg	Leu	Ala
		35					40					45			
Gln	Ala	Ser	His	Thr	Cys	Gly	Ser	Pro	Pro	Glu	Asp	Phe	Cys	Pro	His
	50					55					60				
Val	Gly	Ala	Ala	Gly	Ala	Gly	Ala	His	Cys	Gln	Arg	Cys	Asp	Ala	Ala
65					70					75				80	
Asp	Pro	Gln	Arg	His	His	Asn	Ala	Ser	Tyr	Leu	Thr	Asp	Phe	His	Ser
				85					90					95	
Gln	Asp	Glu	Ser	Thr	Trp	Trp	Gln	Ser	Pro	Ser	Met	Ala	Phe	Gly	Val
			100				105						110		
Gln	Tyr	Pro	Thr	Ser	Val	Asn	Ile	Thr	Leu	Arg	Leu	Gly	Lys	Ala	Tyr
		115				120						125			
Glu	Ile	Thr	Tyr	Val	Arg	Leu	Lys	Phe	His	Thr	Ser	Arg	Pro	Glu	Ser
	130					135					140				
Phe	Ala	Ile	Tyr	Lys	Arg	Ser	Arg	Ala	Asp	Gly	Pro	Trp	Glu	Pro	Tyr
145				150						155				160	
Gln	Phe	Tyr	Ser	Ala	Ser	Cys	Gln	Lys	Thr	Tyr	Gly	Arg	Pro	Glu	Gly
			165					170						175	
Gln	Tyr	Leu	Arg	Pro	Gly	Glu	Asp	Glu	Arg	Val	Ala	Phe	Cys	Thr	Ser
		180					185						190		
Glu	Phe	Ser	Asp	Ile	Ser	Pro	Leu	Ser	Gly	Gly	Asn	Val	Ala	Phe	Ser
	195					200						205			
Thr	Leu	Glu	Gly	Arg	Pro	Ser	Ala	Tyr	Asn	Phe	Glu	Glu	Ser	Pro	Gly
	210					215					220				
Leu	Gln	Glu	Trp	Val	Thr	Ser	Thr	Glu	Leu	Leu	Ile	Ser	Leu	Asp	Arg
225				230					235					240	
Leu	Asn	Thr	Phe	Gly	Asp	Asp	Ile	Phe	Lys	Asp	Pro	Lys	Val	Leu	Gln
			245					250						255	
Ser	Tyr	Tyr	Tyr	Ala	Val	Ser	Asp	Phe	Ser	Val	Gly	Gly	Arg	Cys	Lys

1162

690	695	700
Val Pro Cys Thr Cys Asn Gln His Gly Thr Cys Asp Pro Asn Thr Gly		
705	710	715
Ile Cys Val Cys Ser His His Thr Glu Gly Pro Ser Cys Glu Arg Cys		720
	725	730
Leu Pro Gly Phe Tyr Gly Asn Pro Phe Ala Gly Gln Ala Asp Asp Cys		735
	740	745
Gln Pro Cys Pro Cys Pro Gly Gln Ser Ala Cys Thr Thr Ile Pro Glu		750
	755	760
Ser Gly Glu Val Val Cys Thr His Cys Pro Pro Gly Gln Arg Gly Arg		765
	770	775
Arg Cys Glu Val Cys Asp Asp Gly Phe Phe Gly Asp Pro Leu Gly Leu		780
785	790	795
Phe Gly His Pro Gln Pro Cys His Gln Cys Gln Cys Ser Gly Asn Val		800
	805	810
Asp Pro Asn Ala Val Gly Asn Cys Asp Pro Leu Ser Gly His Cys Leu		815
	820	825
Arg Cys Leu His Asn Thr Thr Gly Asp His Cys Glu His Cys Gln Glu		830
	835	840
Gly Phe Tyr Gly Ser Ala Leu Ala Pro Arg Pro Ala Asp Lys Cys Met		845
	850	855
Pro Cys Ser Cys His Pro Gln Gly Ser Val Ser Glu Gln Met Pro Cys		860
865	870	875
Asp Pro Val Thr Gly Gln Cys Ser Cys Leu Pro His Val Thr Ala Arg		880
	885	890
Asp Cys Ser Arg Cys Tyr Pro Gly Phe Phe Asp Leu Gln Pro Gly Arg		895
	900	905
Gly Cys Arg Ser Cys Lys Cys His Pro Leu Gly Ser Gln Glu Asp Gln		910
	915	920
Cys His Pro Lys Thr Gly Gln Cys Thr Cys Arg Pro Gly Val Thr Gly		925
	930	935
Gln Ala Cys Asp Arg Cys Gln Leu Gly Phe Phe Gly Ser Ser Ile Lys		940
945	950	955
Gly Cys Arg Ala Cys Arg Cys Ser Pro Leu Gly Ala Ala Ser Ala Gln		960
	965	970
Cys His Tyr Asn Gly Thr Cys Val Cys Arg Pro Gly Phe Glu Gly Tyr		975
	980	985
Lys Cys Asp Arg Cys His Tyr Asn Phe Phe Leu Thr Ala Asp Gly Thr		990
	995	1000
His Cys Gln Gln Cys Pro Ser Cys Tyr Ala Leu Val Lys Glu Glu Thr		1005
	1010	1015
Ala Lys Leu Lys Ala Arg Leu Thr Leu Thr Glu Gly Trp Leu Gln Gly		1020
1025	1030	1035
Ser Asp Cys Gly Ser Pro Trp Gly Pro Leu Asp Ile Leu Leu Gly Glu		1040
	1045	1050
Ala Pro Arg Gly Asp Val Tyr Gln Gly His His Leu Leu Pro Gly Ala		1055
	1060	1065
Arg Glu Ala Phe Leu Glu Gln Met Met Gly Leu Glu Gly Ala Val Lys		1070
	1075	1080
Ala Ala Arg Glu Gln Leu Gln Arg Leu Asn Lys Gly Ala Arg Cys Ala		1085
	1090	1095
Gln Ala Gly Ser Gln Lys Thr Cys Thr Gln Leu Ala Asp Leu Glu Ala		1100
1105	1110	1115
Val Leu Glu Ser Ser Glu Glu Glu Ile Leu His Ala Ala Ala Ile Leu		1120

	1125		1130		1135
Ala Ser Leu Glu Ile Pro Gln Glu Gly Pro Ser Gln Pro Thr Lys Trp					
	1140		1145		1150
Ser His Leu Ala Ile Glu Ala Arg Ala Leu Ala Arg Ser His Arg Asp					
	1155		1160		1165
Thr Ala Thr Lys Ile Ala Ala Thr Ala Trp Arg Ala Leu Leu Ala Ser					
	1170		1175		1180
Asn Thr Ser Tyr Ala Leu Leu Trp Asn Leu Leu Glu Gly Arg Val Ala					
1185		1190		1195	1200
Leu Glu Thr Gln Arg Asp Leu Glu Asp Arg Tyr Gln Glu Val Gln Ala					
	1205		1210		1215
Ala Gln Lys Ala Leu Arg Thr Ala Val Ala Glu Val Leu Pro Glu Ala					
	1220		1225		1230
Glu Ser Val Leu Ala Thr Val Arg Gln Val Gly Ala Asp Thr Ala Pro					
	1235		1240		1245
Tyr Leu Ala Leu Leu Ala Ser Pro Gly Ala Leu Pro Gln Lys Ser Arg					
	1250		1255		1260
Ala Glu Asp Leu Gly Leu Lys Ala Lys Ala Leu Glu Lys Thr Val Ala					
1265		1270		1275	1280
Ser Trp Gln His Met Ala Thr Glu Ala Ala Arg Thr Leu Gln Thr Ala					
	1285		1290		1295
Ala Gln Ala Thr Leu Arg Gln Thr Glu Pro Leu Thr Met Ala Arg Ser					
	1300		1305		1310
Arg Leu Thr Ala Thr Phe Ala Ser Gln Leu His Gln Glu Ala Arg Ala					
	1315		1320		1325
Ala Leu Thr Gln Ala Ser Ser Ser Val Gln Ala Ala Thr Val Thr Val					
	1330		1335		1340
Met Gly Ala Arg Thr Leu Leu Ala Asp Leu Glu Gly Met Lys Leu Gln					
1345		1350		1355	1360
Phe Pro Arg Pro Lys Asp Gln Ala Ala Leu Gln Arg Lys Ala Asp Ser					
	1365		1370		1375
Val Ser Asp Arg Leu Leu Ala Asp Thr Arg Lys Lys Thr Lys Gln Ala					
	1380		1385		1390
Glu Arg Met Leu Gly Asn Ala Ala Pro Leu Ser Ser Ser Ala Lys Lys					
	1395		1400		1405
Lys Gly Arg Glu Ala Glu Val Leu Ala Lys Asp Ser Ala Lys Leu Ala					
	1410		1415		1420
Lys Ala Leu Leu Arg Glu Arg Lys Gln Ala His Arg Arg Ala Ser Arg					
1425		1430		1435	1440
Leu Thr Ser Gln Thr Gln Ala Thr Leu Gln Gln Ala Ser Gln Gln Val					
	1445		1450		1455
Leu Ala Ser Glu Ala Arg Arg Gln Glu Leu Glu Glu Ala Glu Arg Val					
	1460		1465		1470
Gly Ala Gly Leu Ser Glu Met Glu Gln Gln Ile Arg Glu Ser Arg Ile					
	1475		1480		1485
Ser Leu Glu Lys Asp Ile Glu Thr Leu Ser Glu Leu Leu Ala Arg Leu					
	1490		1495		1500
Gly Ser Leu Asp Thr His Gln Ala Pro Ala Gln Ala Leu Asn Glu Thr					
1505		1510		1515	1520
Gln Trp Ala Leu Glu Arg Leu Arg Leu Gln Leu Gly Ser Pro Gly Ser					
	1525		1530		1535
Leu Gln Arg Lys Leu Ser Leu Leu Glu Gln Glu Ser Gln Gln Gln Glu					
	1540		1545		1550
Leu Gln Ile Gln Gly Phe Glu Ser Asp Leu Ala Glu Ile Arg Ala Asp					

1555 1560 1565
 Lys Gln Asn Leu Glu Ala Ile Leu His Ser Leu Pro Glu Asn Cys Ala
 1570 1575 1580
 Ser Trp Gln
 1585

<210> 1363
 <211> 392
 <212> DNA
 <213> Homo sapiens

<400> 1363
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 gaaggcgcca ccgaagacaa ggacgtagag gaaagccgcg ctgtgctcga aggcgcagca
 120
 ggaatctgcg aaaccgacaa agatgcggct gtttgagtgg atgtgaagga agatgcaggt
 180
 gtctcatcgg cggggccacc atgaacaacc cttcttgatg ccccgtaggt gacgcgctca
 240
 cacacgacat gcacaacaaa taaatcgcaa agcacagagg gacaatcgaa tacaccttga
 300
 cccatgcact tgcgtgcctg gaggcattggc taccaggcaa tcccctcatt tccagaatga
 360
 gcctgttttt gaaagcgact aggggaagttc ag
 392

<210> 1364
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1364
 Met Arg Gly Leu Pro Gly Ser His Ala Ser Arg His Ala Ser Ala Trp
 1 5 10 15
 Val Lys Val Tyr Ser Ile Val Pro Leu Cys Phe Ala Ile Tyr Leu Leu
 20 25 30
 Cys Met Ser Cys Val Ser Ala Ser Pro Thr Gly His Gln Glu Gly Leu
 35 40 45
 Phe Met Val Ala Pro Pro Met Arg His Leu His Leu Pro Ser His Pro
 50 55 60
 Leu Lys Gln Pro His Leu Cys Arg Phe Arg Arg Phe Leu Leu Arg Leu
 65 70 75 80
 Arg Ala Gln Arg Gly Phe Pro Leu Arg Pro Cys Leu Arg Trp Arg Leu
 85 90 95
 Arg Leu Gln Trp Arg Leu Tyr Pro
 100

<210> 1365
 <211> 451
 <212> DNA
 <213> Homo sapiens

<400> 1365

nnacgcgtga gggagaagat ggatgacacc agcctctata atacgccctg tgcctcggac
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 ctacagcggg ccctgggtca ggatcgccaa gaggcgcctt ggaatgaggt ggatgaggtc
 120
 tggcccaatg tcttcatagc tgagaagagt gtggctgtga acaaggggag gctgaagagg
 180
 ctgggaatca cccacattct gaatgctgcy catggcaccg gcgtttacac tggccccgaa
 240
 ttctacactg gcctggagat ccagtacctg ggtgtagagg tggatgactt tctgaggtg
 300
 gacatttccc agcatttccg gaaggcgtct gagttcctgg atgaggcgct gctgacttac
 360
 agagggaaag tcttggtcag cagcgaaatg ggcatcagcc ggtcagcagt gctgggtggtc
 420
 gcctacctga tgatcttcca caacatggcc a
 451

<210> 1366

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1366

Xaa	Arg	Val	Arg	Glu	Lys	Met	Asp	Asp	Thr	Ser	Leu	Tyr	Asn	Thr	Pro
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Cys	Val	Leu	Asp	Leu	Gln	Arg	Ala	Leu	Val	Gln	Asp	Arg	Gln	Glu	Ala
			20					25					30		
Pro	Trp	Asn	Glu	Val	Asp	Glu	Val	Trp	Pro	Asn	Val	Phe	Ile	Ala	Glu
		35				40					45				
Lys	Ser	Val	Ala	Val	Asn	Lys	Gly	Arg	Leu	Lys	Arg	Leu	Gly	Ile	Thr
	50				55				60						
His	Ile	Leu	Asn	Ala	Ala	His	Gly	Thr	Gly	Val	Tyr	Thr	Gly	Pro	Glu
65			70						75					80	
Phe	Tyr	Thr	Gly	Leu	Glu	Ile	Gln	Tyr	Leu	Gly	Val	Glu	Val	Asp	Asp
			85					90						95	
Phe	Pro	Glu	Val	Asp	Ile	Ser	Gln	His	Phe	Arg	Lys	Ala	Ser	Glu	Phe
			100					105					110		
Leu	Asp	Glu	Ala	Leu	Leu	Thr	Tyr	Arg	Gly	Lys	Val	Leu	Val	Ser	Ser
	115					120						125			
Glu	Met	Gly	Ile	Ser	Arg	Ser	Ala	Val	Leu	Val	Val	Ala	Tyr	Leu	Met
	130					135						140			
Ile	Phe	His	Asn	Met	Ala										
145					150										

<210> 1367

<211> 330

<212> DNA

<213> Homo sapiens

<400> 1367

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 cgccgatacy cgccaacgcc gtagaccgcy aacgctggct caccggcgcc gctgtactgc
 120

tcgtcgtcgc attgctgctg gtcacgtcgc cactgcccgt cagcgcactc gtcggccaga
 180
 gcttcttcga ccgcgaaggc gccttcgtcg gcctcgccaa cttcgctcgc tacctcgaca
 240
 accccgcctt ggtccagtcc gccttcaaca gcctctggct ggccgcgac agcgccgtca
 300
 tctgcaccgc catcgcttac gtctacgcgt
 330

<210> 1368
 <211> 82
 <212> PRT
 <213> Homo sapiens

<400> 1368
 Thr Ala Asn Ala Gly Ser Pro Ala Pro Leu Tyr Cys Ser Ser Ser His
 1 5 10 15
 Cys Cys Trp Ser Ser Ser His Cys Pro Ser Ala His Ser Ser Ala Arg
 20 25 30
 Ala Ser Ser Thr Ala Lys Ala Pro Ser Ser Ala Ser Pro Thr Ser Leu
 35 40 45
 Ala Thr Ser Thr Thr Pro Pro Trp Ser Ser Pro Pro Ser Thr Ala Ser
 50 55 60
 Gly Trp Pro Arg Ser Ala Pro Ser Ser Ala Pro Pro Ser Pro Thr Ser
 65 70 75 80
 Thr Arg

<210> 1369
 <211> 356
 <212> DNA
 <213> Homo sapiens

<400> 1369
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 catcacctgt acgtactgca ggctctcatg ctggggctgc tggagccgcg catgcggacg
 120
 cccctggacc cctacagcca ggagcagcgg gagcagctgc aggtcctacg ccaggctgcc
 180
 ttcgaggtgg agggggagtc ctccgggtgcc gggctaagtg ctgaccgtcg ccgttccttc
 240
 tgtgcccag agttccgcaa actgggcttt tctaacagca acccagcaca ggacctggag
 300
 cgcgtgcccc ccggtctgct ggccctggac aacatgttgt acttctccag aaacgc
 356

<210> 1370
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1370
 Met Gly Asp Glu Met Ala His His Leu Tyr Val Leu Gln Ala Leu Met

```

1           5           10           15
Leu Gly Leu Leu Glu Pro Arg Met Arg Thr Pro Leu Asp Pro Tyr Ser
           20           25           30
Gln Glu Gln Arg Glu Gln Leu Gln Val Leu Arg Gln Ala Ala Phe Glu
           35           40           45
Val Glu Gly Glu Ser Ser Gly Ala Gly Leu Ser Ala Asp Arg Arg Arg
           50           55           60
Ser Leu Cys Ala Arg Glu Phe Arg Lys Leu Gly Phe Ser Asn Ser Asn
65           70           75           80
Pro Ala Gln Asp Leu Glu Arg Val Pro Pro Gly Leu Leu Ala Leu Asp
           85           90           95
Asn Met Leu Tyr Phe Ser Arg Asn
           100

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<210> 1371
 <211> 648
 <212> DNA
 <213> Homo sapiens

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<400> 1371
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60
tggtcagcgg ttggattagc cagttctgca gactggctca caccagacc atctggaccg
120
cttatagaga agacatgttc caagtaccct ctttcctttg tctgcttttc tcatgggtac
180
tttgccctct aagaagccta ctttcctctt ttctctctct cctctcccta tttctctttg
240
ttgagagagc agtcagatta acccaacaac tcttgaggatg ccttggtcac ctgagagcat
300
ggaaagtcca tgccctcacc agagtaatga ctaccatttc tccaaaactc tctcatgcc
360
atccgatagg cagtattgat cagaagggga aatctagtgt gttaaaattg ataaaccagc
420
ttaagttata cctacaataa aagaccagc cttagcccat ggctgaatgt tgaatactgt
480
tgcattgaaa tttgggattt ctagtttagag gctttataaa ggtagaatca tgcagacaca
540
tatacctgga aatattcgga acattctatt agcagaaatg caatgtagga agcttattgg
600
ttctagaaga atgtgtcatt gtcagtaatt ggaattactg acagatct
648

```

<210> 1372
 <211> 101
 <212> PRT
 <213> Homo sapiens

```

<400> 1372
Met Phe Gln Val Pro Ser Phe Leu Cys Leu Leu Phe Ser Trp Val Leu
1           5           10           15
Cys Pro Leu Arg Ser Leu Leu Ser Ser Phe Pro Leu Leu Leu Ser Leu
           20           25           30
Phe Leu Phe Val Glu Arg Ala Val Arg Leu Thr Gln Gln Leu Leu Glu

```

```

      35              40              45
Cys Leu Gly His Leu Arg Ala Trp Lys Val His Ala Leu Thr Arg Val
      50              55              60
Met Thr Thr Ile Ser Pro Lys Leu Ser Ser Cys His Pro Ile Gly Ser
65      70              75              80
Ile Asp Gln Lys Gly Lys Ser Ser Val Leu Lys Leu Ile Asn Gln Leu
      85              90              95
Lys Leu Tyr Leu Gln
      100

```

<210> 1373

<211> 369

<212> DNA

<213> Homo sapiens

<400> 1373

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caattggttt tccccaactt tctacttgca aagcaacttc ttagacctgg ggctcctctt
60
tgcaggcgcc ctgcatggca gagaactttt tccaccacaa ccttcgtgta acaggcagtt
120
acatggggttt catgggtcga catgggttcc gtgtcctgct tgccgggcct gagctgtttg
180
tcagggtgtac aaccgagaac cttgcagacc agaatccaag actccgcagc atgtgtgtgc
240
cggggcgggga cagcagctgt tggaggagaa agccatcagt gtatttagag gcaaagggct
300
tcctaaatcg aggctgtgca ggctcctga aagtccttac ccaagcttcc gaggtaaatc
360
ctctccgca
369

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<210> 1374

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1374

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Met Ala Glu Asn Phe Phe His His Asn Leu Arg Val Thr Gly Ser Tyr
1      5      10      15
Met Gly Phe Met Gly Arg His Gly Phe Arg Val Leu Leu Ala Gly Pro
20      25      30
Glu Leu Phe Val Arg Cys Thr Thr Glu Asn Leu Ala Asp Gln Asn Pro
35      40      45
Arg Leu Arg Ser Met Cys Val Pro Gly Arg Asp Thr Ser Cys Trp Arg
50      55      60
Arg Lys Pro Ser Val Tyr Leu Glu Ala Lys Gly Phe Leu Asn Arg Gly
65      70      75      80
Cys Ala Gly Leu Leu Lys Val Leu Thr Gln Ala Ser Glu Val Asn Pro
85      90      95
Leu Arg

```

<210> 1375

<211> 282

<212> DNA

<213> Homo sapiens

<400> 1375

nacgcgttcg accgcgccac gcgcgggcac gttatcgact acatcgactt tcacctgcac
 60
 ggctggcact ggcccgcctt caacatcgct gacatggcca tcgtgggcgg ggcgatcgcg
 120
 ctggtggccc agtcgttcat gagcgtggag aaccgggccg ccacaaagga gtcccagtga
 180
 cattgggacg atccggaaat tcgcaatgca cacggtgcag gacaccaatc tgaagagaac
 240
 ggccccagc atgagcggcc gcggcttggc cctcatgcta gc
 282

<210> 1376

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1376

Xaa Ala Phe Asp Arg Ala Thr Arg Gly His Val Ile Asp Tyr Ile Asp
 1 5 10 15
 Phe His Leu His Gly Trp His Trp Pro Ala Phe Asn Ile Ala Asp Met
 20 25 30
 Ala Ile Val Gly Gly Ala Ile Ala Leu Val Ala Gln Ser Phe Met Ser
 35 40 45
 Val Glu Asn Pro Ala Ala Thr Lys Glu Ser Gln
 50 55

<210> 1377

<211> 6306

<212> DNA

<213> Homo sapiens

<400> 1377

tagtaagaca ggtgccttca gttcactctc agtaaggggc tggttgacctg catgagtgtg
 60
 tgctctgtgt cactgtggat tggagttgaa aaagcttgac tggcgtcatt caggagctgg
 120
 atggcgtggg acatgtgcaa ccaggactct gagtctgtat ggagtgcacat cgagtgtgct
 180
 gctctggttg gtgaagacca gcctctttgc ccagatcttc ctgaacttga tctttctgaa
 240
 ctagatgtga acgacttggg tacagacagc tttctgggtg gactcaagtg gtgcagtgc
 300
 caatcagaaa taatatccaa tcagtacaac aatgagcctt caaacatatt tgagaagata
 360
 gatgaagaga atgaggcaaa cttgctagca gtcctcacag agacactaga cagtctccct
 420
 gtggatgaag acggattgcc ctcatttgat gcgctgacag atggagacgt gaccactgac
 480
 aatgaggcta gtccttcttc catgcctgac ggcacccttc caccacagga ggcagaagag
 540

ccgtctctac ttaagaagct cttactggca ccagccaaca ctcagctaag ttataatgaa
600
tgcaagtggc tcagtaccca gaacatgca aatcacatc acaggatcag aacaaaccct
660
gcaattgtta agactgagaa ttcattggagc aataaagcga agagtatttg tcaacagcaa
720
aagccacaaa gacgtccctg ctctggagctt ctcaaatac tgaccacaaa cgatgaccct
780
cctcacacca aaccacaga gaacagaaac agcagcagag acaaatgcac ctccaaaaag
840
aagtcacaca cacagtgcga gtcacaacac ttacaagcca aaccaacaac tttatctctt
900
cctctgaccc cagagtcacc aaatgacccc aagggttccc catttgagaa caagactatt
960
gaacgcacct taagtgtgga actctctgga actgcaggcc taactccacc caccactcct
1020
cctcataaag ccaaccaaga taaccctttt agggcttctc caaagctgaa gtcctcttgc
1080
aagactgtgg tgccaccacc atcaaagaag cccagggtaca gtgagtcttc tggtagacaa
1140
ggcaataact ccaccaagaa agggccggag caatccgagt tgtatgcaca actcagcaag
1200
tcctcagtcc tcaactggtg acacgaggaa aggaagacca agcggcccag tctgcggctg
1260
tttggtgacc atgactattg ccagtcaatt aattccaaaa cggaaatact cattaatata
1320
tcacaggagc tccaagactc tagacaacta gaaaataaag atgtctcttc tgattggcag
1380
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<210> 1378

<211> 798

<212> PRT

<213> Homo sapiens

<400> 1378

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Leu	Pro	Glu	Leu	Asp	Leu	Ser	Glu	Leu	Asp	Val	Asn	Asp	Leu	Asp	Thr
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Asp	Ser	Phe	Leu	Gly	Gly	Leu	Lys	Trp	Cys	Ser	Asp	Gln	Ser	Glu	Ile
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65				70						75				80	
Asp	Glu	Glu	Asn	Glu	Ala	Asn	Leu	Leu	Ala	Val	Leu	Thr	Glu	Thr	Leu
			85					90					95		
Asp	Ser	Leu	Pro	Val	Asp	Glu	Asp	Gly	Leu	Pro	Ser	Phe	Asp	Ala	Leu
			100					105					110		
Thr	Asp	Gly	Asp	Val	Thr	Thr	Asp	Asn	Glu	Ala	Ser	Pro	Ser	Ser	Met

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Pro Asp Gly Thr Pro Pro Pro Gln Glu Ala Glu Glu Pro Ser Leu Leu		
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Lys Lys Leu Leu Leu Ala Pro Ala Asn Thr Gln Leu Ser Tyr Asn Glu		
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Cys Ser Gly Leu Ser Thr Gln Asn His Ala Asn His Asn His Arg Ile		160
165	170	175
Arg Thr Asn Pro Ala Ile Val Lys Thr Glu Asn Ser Trp Ser Asn Lys		
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Ala Lys Ser Ile Cys Gln Gln Gln Lys Pro Gln Arg Arg Pro Cys Ser		
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Glu Leu Leu Lys Tyr Leu Thr Asn Asp Asp Pro Pro His Thr Lys		
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Pro Thr Glu Asn Arg Asn Ser Ser Arg Asp Lys Cys Thr Ser Lys Lys		
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Lys Ser His Thr Gln Ser Gln Ser Gln His Leu Gln Ala Lys Pro Thr		240
245	250	255
Thr Leu Ser Leu Pro Leu Thr Pro Glu Ser Pro Asn Asp Pro Lys Gly		
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Ser Pro Phe Glu Asn Lys Thr Ile Glu Arg Thr Leu Ser Val Glu Leu		
275	280	285
Ser Gly Thr Ala Gly Leu Thr Pro Pro Thr Thr Pro Pro His Lys Ala		
290	295	300
Asn Gln Asp Asn Pro Phe Arg Ala Ser Pro Lys Leu Lys Ser Ser Cys		
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Lys Thr Val Val Pro Pro Pro Ser Lys Lys Pro Arg Tyr Ser Glu Ser		320
325	330	335
Ser Gly Thr Gln Gly Asn Asn Ser Thr Lys Lys Gly Pro Glu Gln Ser		
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Glu Leu Tyr Ala Gln Leu Ser Lys Ser Ser Val Leu Thr Gly Gly His		
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Glu Glu Arg Lys Thr Lys Arg Pro Ser Leu Arg Leu Phe Gly Asp His		
370	375	380
Asp Tyr Cys Gln Ser Ile Asn Ser Lys Thr Glu Ile Leu Ile Asn Ile		
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Ser Gln Glu Leu Gln Asp Ser Arg Gln Leu Glu Asn Lys Asp Val Ser		400
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Ser Asp Trp Gln Gly Gln Ile Cys Ser Ser Thr Asp Ser Asp Gln Cys		
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Tyr Leu Arg Glu Thr Leu Glu Ala Ser Lys Gln Val Ser Pro Cys Ser		
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Thr Arg Lys Gln Leu Gln Asp Gln Glu Ile Arg Ala Glu Leu Asn Lys		
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His Phe Gly His Pro Ser Gln Ala Val Phe Asp Asp Glu Ala Asp Lys		
465	470	475
Thr Gly Glu Leu Arg Asp Ser Asp Phe Ser Asn Glu Gln Phe Ser Lys		480
485	490	495
Leu Pro Met Phe Ile Asn Ser Gly Leu Ala Met Asp Gly Leu Phe Asp		
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Asp Ser Glu Asp Glu Ser Asp Lys Leu Ser Tyr Pro Trp Asp Gly Thr		
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Gln Ser Tyr Ser Leu Phe Asn Val Ser Pro Ser Cys Ser Ser Phe Asn		
530	535	540
Ser Pro Cys Arg Asp Ser Val Ser Pro Pro Lys Ser Leu Phe Ser Gln		

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 Arg His Arg Thr His Arg Asn Ser Pro Leu Tyr Val Arg Ser Arg Ser
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 Arg Ser Pro Tyr Ser Arg Arg Pro Arg Tyr Asp Ser Tyr Glu Glu Tyr
 625 630 635 640
 Gln His Glu Arg Leu Lys Arg Glu Glu Tyr Arg Arg Glu Tyr Glu Lys
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 675 680 685
 Thr Arg Thr Glu Leu Arg Asp Arg Phe Glu Val Phe Gly Glu Ile Glu
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 Glu Cys Thr Val Asn Leu Arg Asp Asp Gly Asp Ser Tyr Gly Phe Ile
 705 710 715 720
 Thr Tyr Arg Tyr Thr Cys Asp Ala Phe Ala Ala Leu Glu Asn Gly Tyr
 725 730 735
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 740 745 750
 Arg Lys Gln Phe Phe Lys Ser Asn Tyr Ala Asp Leu Asp Ser Asn Ser
 755 760 765
 Asp Asp Phe Asp Pro Ala Ser Thr Lys Ser Lys Tyr Asp Ser Leu Asp
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<210> 1379

<211> 590

<212> DNA

<213> Homo sapiens

<400> 1379

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<210> 1380
 <211> 141
 <212> PRT
 <213> Homo sapiens

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 Cys Pro Cys Arg Val Ala Ala Ser Pro Ile Ser Ala Leu Gly Val Pro
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 Ala Leu Trp Pro Arg His Pro Ser Leu Pro Ser Glu Ser Leu Pro Cys
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 Gly Arg Val Xaa Pro Ser Leu Pro Ser Glu Ser Leu Pro Cys Gly Arg
 65 70 75 80
 Val Xaa Pro Pro Leu Pro Ser Val Ser Leu Pro Cys Gly Arg Val Xaa
 85 90 95
 Pro Pro Leu Pro Ser Val Ser Leu Pro Cys Gly Arg Val Xaa Pro Pro
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<210> 1381
 <211> 433
 <212> DNA
 <213> Homo sapiens

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<210> 1382

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1382

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Gly Arg Ser Thr Leu Thr Ala Leu Ala Lys His Ser Phe Pro Cys Pro
      35           40           45
Gly Cys His Gln Arg Gly Gly Arg Ser His Arg Ser Ala Leu Val Ser
      50           55           60
Ala Gly Leu Lys Trp Gly Phe Ser Phe Cys Val Glu Gln Phe Ile Arg
65           70           75           80
Gly Leu Ile Ser Lys Pro Arg His Trp Pro Cys Thr Cys Ser Ser Arg
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<210> 1383

<211> 906

<212> DNA

<213> Homo sapiens

<400> 1383

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 <211> 97
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 <213> Homo sapiens

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 35 40 45
 Thr Ala Ser Ser Leu Leu Pro Leu Thr Asn Thr Pro Gln Thr Pro His
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 Met Ser Ser Pro Thr Pro Pro Arg Ala Met Val Leu Thr Lys Gln Arg
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<210> 1385
 <211> 210
 <212> DNA
 <213> Homo sapiens

<400> 1385
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<210> 1386
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 1386
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 <213> Homo sapiens

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<210> 1388
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1388
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 Ser Pro Gly Gly Gln His Thr Glu Ala Gly Glu Asp Glu Gly Val Val
 35 40 45
 Ala Ala Asp Gly Ser Ser Asp Ser Thr Ala Gly Asp Gly Gly Lys Glu
 50 55 60
 Ser Glu Asp Glu Asp Ser Asp Arg Gly Gly Glu His Arg Cys Ser Phe
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 Val Arg Ala Gly Tyr Pro Ala Ile Cys His Pro His Ala Ala Thr Gly
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 Ala Ala Phe Ser Gly His Pro
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<210> 1389
 <211> 4013

<212> DNA

<213> Homo sapiens

<400> 1389

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<210> 1390

<211> 1156

<212> PRT

<213> Homo sapiens

<400> 1390

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			20					25					30		
Thr	Ile	Ile	Ser	Thr	Ile	Pro	Ser	Thr	Ala	Met	His	Thr	Arg	Ser	Thr
			35					40				45			
Ala	Ala	Pro	Ile	Pro	Ile	Leu	Pro	Glu	Arg	Gly	Val	Ser	Leu	Phe	Pro
			50				55				60				
Tyr	Gly	Ala	Asp	Ala	Gly	Asp	Leu	Glu	Phe	Val	Arg	Arg	Thr	Val	Asp
65					70					75				80	
Phe	Thr	Ser	Pro	Leu	Phe	Lys	Pro	Ala	Thr	Gly	Phe	Pro	Leu	Gly	Ser
			85						90					95	
Ser	Leu	Arg	Asp	Ser	Leu	Tyr	Phe	Thr	Asp	Asn	Gly	Gln	Ile	Ile	Phe
			100					105					110		
Pro	Glu	Ser	Asp	Tyr	Gln	Ile	Phe	Ser	Tyr	Pro	Asn	Pro	Leu	Pro	Thr
			115					120					125		
Gly	Phe	Thr	Gly	Arg	Asp	Pro	Val	Ala	Leu	Val	Ala	Pro	Phe	Trp	Asp

130	135	140
Asp Ala Asp Phe Ser Thr Gly Arg Gly Thr Thr Phe Tyr Gln Glu Tyr		
145	150	155
Glu Thr Phe Tyr Gly Glu His Ser Leu Leu Val Gln Gln Ala Glu Ser		160
	165	170
Trp Ile Arg Lys Ile Thr Asn Asn Gly Gly Tyr Lys Ala Arg Trp Ala		175
	180	185
Leu Lys Val Thr Trp Val Asn Ala His Ala Tyr Pro Ala Gln Trp Thr		190
	195	200
Leu Gly Ser Asn Thr Tyr Gln Ala Ile Leu Ser Thr Asp Gly Ser Arg		205
	210	215
Ser Tyr Ala Leu Phe Leu Tyr Gln Ser Gly Gly Met Gln Trp Asp Val		220
225	230	235
Ala Gln Arg Ser Gly Asn Pro Val Leu Met Gly Phe Ser Ser Gly Asp		240
	245	250
Gly Tyr Phe Glu Asn Ser Pro Leu Met Ser Gln Pro Val Trp Glu Arg		255
	260	265
Tyr Arg Pro Asp Arg Phe Leu Asn Ser Asn Ser Gly Leu Gln Gly Leu		270
	275	280
Gln Phe Tyr Arg Leu His Arg Glu Glu Arg Pro Asn Tyr Arg Leu Glu		285
	290	295
Cys Leu Gln Trp Leu Lys Ser Gln Pro Arg Trp Pro Ser Trp Gly Trp		300
305	310	315
Asn Gln Val Ser Cys Pro Cys Ser Trp Gln Gln Gly Arg Arg Asp Leu		320
	325	330
Arg Phe Gln Pro Val Ser Ile Gly Arg Trp Gly Leu Gly Ser Arg Gln		335
	340	345
Leu Cys Ser Phe Thr Ser Trp Arg Gly Gly Val Cys Cys Ser Tyr Gly		350
	355	360
Pro Trp Gly Glu Phe Arg Glu Gly Trp His Val Gln Arg Pro Trp Gln		365
	370	375
Leu Ala Gln Glu Leu Glu Pro Gln Ser Trp Cys Cys Arg Trp Asn Asp		380
385	390	395
Lys Pro Tyr Leu Cys Ala Leu Tyr Gln Gln Arg Arg Pro His Val Gly		400
	405	410
Cys Ala Thr Tyr Arg Pro Pro Gln Pro Ala Trp Met Phe Gly Asp Pro		415
	420	425
His Ile Thr Thr Leu Asp Gly Val Ser Tyr Thr Phe Asn Gly Leu Gly		430
	435	440
Asp Phe Leu Leu Val Gly Ala Gln Asp Gly Asn Ser Ser Phe Leu Leu		445
	450	455
Gln Gly Arg Thr Ala Gln Thr Gly Ser Ala Gln Ala Thr Asn Phe Ile		460
465	470	475
Ala Phe Ala Ala Gln Tyr Arg Ser Ser Ser Leu Gly Pro Val Thr Val		480
	485	490
Gln Trp Leu Leu Glu Pro His Asp Ala Ile Arg Val Leu Leu Asp Asn		495
	500	505
Gln Thr Val Thr Phe Gln Pro Asp His Glu Asp Gly Gly Gly Gln Glu		510
	515	520
Thr Phe Asn Ala Thr Gly Val Leu Leu Ser Arg Asn Gly Ser Glu Val		525
	530	535
Ser Ala Ser Phe Asp Gly Trp Ala Thr Val Ser Val Ile Ala Leu Ser		540
545	550	555
Asn Ile Leu His Ala Ser Ala Ser Leu Pro Pro Glu Tyr Gln Asn Arg		560

1185

```

          995              1000              1005
Pro Arg Arg Ser Glu Glu Pro Arg Asn Asp Val Val Phe Gln Pro Ile
  1010              1015              1020
Ser Gly Glu Asp Val Arg Asp Val Thr Ala Leu Asn Val Ser Thr Leu
  1025              1030              1035              1040
Lys Ala Tyr Phe Arg Cys Asp Gly Tyr Lys Gly Tyr Asp Leu Val Tyr
          1045              1050              1055
Ser Pro Gln Ser Gly Phe Thr Cys Val Ser Pro Cys Ser Arg Gly Tyr
          1060              1065              1070
Cys Asp His Gly Gly Gln Cys Gln His Leu Pro Ser Gly Pro Arg Cys
  1075              1080              1085
Ser Cys Val Ser Phe Ser Ile Tyr Thr Ala Trp Gly Glu His Cys Glu
  1090              1095              1100
His Leu Ser Met Lys Leu Asp Ala Phe Phe Gly Ile Phe Phe Gly Ala
  1105              1110              1115              1120
Leu Gly Gly Leu Leu Leu Leu Gly Val Gly Thr Phe Val Val Leu Arg
          1125              1130              1135
Phe Trp Gly Cys Ser Gly Ala Arg Phe Ser Tyr Phe Leu Asn Ser Ala
          1140              1145              1150
Glu Ala Leu Pro
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```

<210> 1391
 <211> 481
 <212> DNA
 <213> Homo sapiens

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<400> 1391
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120
ctggcgccgc gcaaggtgct cggtaaaagc aagcagaagg ccgaggagct ggcggtccgg
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caactgaccc acgtgggcct gagcgacaag ctcaagacct ttcccgcana gctttccggc
240
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481

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<210> 1392
 <211> 160
 <212> PRT
 <213> Homo sapiens

```

<400> 1392
Val Asp Gly Ile Glu Val His Asp Lys Ala Thr Asp Leu Asn Arg Leu

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```

      1           5           10           15
Arg Gln Lys Ile Gly Ile Val Phe Gln Gln Trp Asn Ala Phe Pro His
      20           25           30
Leu Thr Val Leu Glu Asn Val Met Leu Ala Pro Arg Lys Val Leu Gly
      35           40           45
Lys Ser Lys Gln Lys Ala Glu Glu Leu Ala Val Arg Gln Leu Thr His
      50           55           60
Val Gly Leu Ser Asp Lys Leu Lys Thr Phe Pro Ala Xaa Leu Ser Gly
      65           70           75           80
Gly Gln Gln Gln Arg Met Ala Ile Ala Arg Ala Leu Ala Met Ser Pro
      85           90           95
Asp Tyr Met Leu Phe Asp Glu Ala Thr Ser Ala Leu Asp Pro Gln Leu
      100          105          110
Val Gly Glu Val Leu Asp Thr Met Arg Met Leu Ala Glu Asp Gly Met
      115          120          125
Thr Met Val Leu Val Thr His Glu Ile Arg Phe Ala Arg Asp Val Ser
      130          135          140
Asp Arg Val Ala Phe Phe Arg Asn Gly Leu Val His Glu Ile Gly Ala
      145          150          155          160

```

<210> 1393

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1393

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tacgaaccgc acgaacacgc acaccgcaag cccgagtcgt tgtacggcgc ggtcaagatg
120
tgggccccttc tgcgccgtca gggcatcagg tggcccgcgtg cancggtgga gcgcctcatg
180
cgggacaacc ggtggcgtgg ggtgaccgcg cgtaagaagg ttncgcacca ccatcgctga
240
cccggctgcc gggcgagccc cggatctggt ggaccgccag ttccgcgtcg aggcgcccac
300
caagttgct
309

```

<210> 1394

<211> 79

<212> PRT

<213> Homo sapiens

<400> 1394

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Arg Pro Pro Ser Ala Arg Ala Leu Trp Asp Met Ala Ile Thr Glu Val
      1           5           10           15
Leu Ala Gly Tyr Tyr Glu Pro Asp Glu His Gly His Arg Lys Pro Glu
      20           25           30
Ser Leu Tyr Gly Ala Val Lys Met Trp Ala Leu Leu Arg Arg Gln Gly
      35           40           45
Ile Arg Trp Pro Ala Ala Xaa Val Glu Arg Leu Met Arg Asp Asn Arg
      50           55           60
Trp Arg Gly Val Thr Arg Arg Lys Lys Val Xaa His His His Arg

```

65

70

75

<210> 1395

<211> 347

<212> DNA

<213> Homo sapiens

<400> 1395

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tatgacggta gtcgtgggcg aaacgggtgct tgctgttggt cgccgtcaac gtcgaagage
120
ccagattcctt aaaggcggtc gcatgtttgc ccgggcgaca agggccttgg ctggacgggt
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240
ggctcaggct aggcggggtc atgcagtggg cggaagcgtt tccgacgccc tcattgccac
300
ctccccgcaa ccagggatgg ctggtctggt gccactagcc caccgct
347

```

<210> 1396

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1396

```

Met Thr Val Val Gly Glu Thr Val Leu Val Val Val Arg Arg Gln
1           5           10          15
Arg Arg Arg Ala Gln Ile Leu Lys Gly Gly Arg Asp Val Ala Arg Ala
20          25          30
Thr Arg Ala Leu Ala Gly Arg Val Ser Val Gly Glu Ile Pro Ser Val
35          40          45
Ala Leu Glu His Val Ala Asp Asp Val Glu Val Leu Ala Gln Ala Arg
50          55          60
Arg Ala His Ala Val Gly Gly Ser Val Ser Asp Ala Leu Ile Ala Thr
65          70          75          80
Ser Arg Gln Pro Gly Met Ala Gly Leu Val Pro Leu Ala His Ala
85          90          95

```

<210> 1397

<211> 308

<212> DNA

<213> Homo sapiens

<400> 1397

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ctggcccgcg tcgcgattgc cgccactatc cattctccgg aacgcgcgca agacatggtc
120
aaccgcttga gcaaacgcga agaaggcttc acgcaatggg tacgtgccgc acaggacgat
180
ggtcgactgt cctgcagcga cccggcggtc gctgcccacc agatacaaag cctgctcaag
240

```


gcgttcgcct tttggccgca aatcacccctg ggccagccgg tgctggatgc cgccagccag
 300
 gccaacgt
 308

<210> 1398
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 1398
 Met Gln Met Met Ser Asp Thr Asn Phe Leu Asp Leu Ala Arg Val Ala
 1 5 10 15
 Ile Ala Ala Thr Ile His Ser Pro Glu Arg Ala Gln Asp Met Val Asn
 20 25 30
 Arg Leu Ser Lys Arg Glu Glu Gly Phe Thr Gln Trp Val Arg Ala Ala
 35 40 45
 Gln Asp Asp Gly Arg Leu Ser Cys Ser Asp Pro Ala Phe Ala Ala His
 50 55 60
 Gln Ile Gln Ser Leu Leu Lys Ala Phe Ala Phe Trp Pro Gln Ile Thr
 65 70 75 80
 Leu Gly Gln Pro Val Leu Asp Ala Ala Ser Gln Ala Asn
 85 90

<210> 1399
 <211> 539
 <212> DNA
 <213> Homo sapiens

<400> 1399
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 180
 ataattatat acatctgttc ctattccttt ggtaggacct ttaagaaagt catgctgaat
 240
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 420
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 480
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 539

<210> 1400
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 1400

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Met Asn Val Gly Tyr Ser Phe Thr His Arg Cys Thr Asp Ser Leu Tyr
 1           5           10           15
Ile Thr His Pro Val Gly Val Leu Asn Phe Phe Phe Ser Arg Pro Thr
           20           25           30
Phe Lys Ser Cys His Val Ile Ser Thr His Asn Leu Trp His Phe Ser
           35           40           45
Phe Phe Thr Leu Tyr Ser Leu Ile Thr Tyr Thr Cys Thr Cys Leu Lys
           50           55           60
Cys Gln Thr Ile Gln Met Gly Thr Lys Lys Ile Ala Ser Pro Ser Val
65           70           75           80
Asn Pro Ser Phe Cys Ser Pro Leu His Ala
           85           90

```

<210> 1401

<211> 653

<212> DNA

<213> Homo sapiens

<400> 1401

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120
ncattgggggt ttgatggccg cgtttcctcg ctgctgggcg cgatcctcat cgtcaccggc
180
ccaacggtga ttaacccgat cctgcgtcag ttgcgtccta cccggcgagt gaggctctg
240
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caggccataa ccagcatcga ccgatcttcc atcggaacaag gcgtcttgaa tctggggctc
360
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420
aaacggcacc tcatcccga cttectacaa ggcgtgattt tcgttgggggt cgccgttgg
480
acgtgtgttg gcgctaact cattcgggag gaatcgggcc tggtcgccgt tacgatgctc
540
ggcatctacc tggcgaacca gcgcaacctc gagcttgagc ccgtcatcga gttcaaggaa
600
cacctgcagg tgctcctcgt tggcgctcta ttcatcatgc ttgcaggacg cgt
653

```

<210> 1402

<211> 217

<212> PRT

<213> Homo sapiens

<400> 1402

```

Phe Glu Gly Ser Leu Gly Leu Lys Leu Arg Glu Val Arg Asp Leu Gly
 1           5           10           15
Arg Pro Ile Phe Arg Leu Cys Thr Val Thr Ala Arg Leu Ala Trp Val
           20           25           30
Xaa Ser Ser Pro Ala Arg Arg Trp Xaa Leu Gly Phe Asp Gly Arg Val

```

```

      35              40              45
Ser Leu Leu Leu Gly Ala Ile Leu Ile Val Thr Gly Pro Thr Val Ile
      50              55              60
Asn Pro Ile Leu Arg Gln Leu Arg Pro Thr Arg Arg Val Ser Ala Leu
65              70              75              80
Leu Arg Trp Glu Gly Ile Val Val Asp Pro Leu Gly Ala Ile Leu Ala
      85              90              95
Leu Leu Val Tyr Gln Ala Ile Thr Ser Ile Asp Arg Ser Ser Ile Gly
      100             105             110
Gln Gly Val Leu Asn Leu Gly Leu Thr Leu Leu Val Gly Leu Leu Phe
      115             120             125
Ala Gly Pro Ile Gly Trp Ile Val Thr Ala Met Met Lys Arg His Leu
      130             135             140
Ile Pro Asp Phe Leu Gln Gly Val Ile Phe Val Gly Val Ala Val Gly
145             150             155             160
Thr Cys Val Gly Ala Asn Val Ile Arg Glu Glu Ser Gly Leu Val Ala
      165             170             175
Val Thr Met Leu Gly Ile Tyr Leu Ala Asn Gln Arg Asn Leu Glu Leu
      180             185             190
Glu Pro Val Ile Glu Phe Lys Glu His Leu Gln Val Leu Leu Val Gly
      195             200             205
Val Leu Phe Ile Met Leu Ala Gly Arg
      210             215

```

<210> 1403

<211> 393

<212> DNA

<213> Homo sapiens

<400> 1403

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180
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240
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300
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393

```

<210> 1404

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1404

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Met Lys Gln Leu Gln Glu Ala Leu Val Asp Ile Glu Thr Asp Ala Glu
  1              5              10              15
Lys Val Leu Leu Ala Arg His Gln Leu Val Glu Asn Asp Lys Ile Arg

```

	20		25		30		
Asn Gly	Asn Arg	Glu Ala	Leu Thr	Ala Leu	Arg Lys	Gln Ala	Arg Thr
	35		40		45		
Ser Lys	Thr Ser	Val Pro	Ser Pro	Phe Glu	Val Ile	Met Lys	Glu Met
	50		55		60		
Glu Gly	Ser Ser	Gly Lys	Gln Leu	Ile Lys	Glu Ile	Cys Pro	Thr Cys
65		70		75		80	
Gly Asp	His Asp	Pro Lys	Glu His	Thr Trp	Leu Met	Phe Pro	Gly Ser
	85		90		95		
Asp Met	Phe Ala	Arg Val	Pro Phe	His Val	Ala His	Thr Val	Val Glu
	100		105		110		
Lys Asp	Gln Glu	Arg Leu	Asp Leu	Asp Thr	Lys Lys	Leu Gln	Ser
	115		120		125		

<210> 1405

<211> 421

<212> DNA

<213> Homo sapiens

<400> 1405

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421

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<210> 1406

<211> 140

<212> PRT

<213> Homo sapiens

<400> 1406

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1		5		10		15	
Val Ile	Val Lys	Gly Glu	Thr Ser	Leu Gln	Trp Leu	Gly Pro	Asp Glu
	20		25		30		
Trp Leu	Leu Ile	Val Pro	Ser Gly	Glu Glu	Phe Ala	Ala Glu	Gln Asn
	35		40		45		
Leu Arg	Ala Ala	Leu Gly	Glu Leu	His Ile	Gln Val	Val Asn	Val Ser
	50		55		60		
Gly Gly	Gln Gln	Ile Leu	Glu Leu	Ser Gly	Pro Asn	Val Arg	Asp Val
65		70		75		80	
Leu Met	Lys Ser	Thr Ser	Tyr Asp	Val His	Pro Asn	Asn Phe	Pro Val

	85		90		95										
Gly	Lys	Ala	Val	Gly	Thr	Val	Phe	Ala	Lys	Ser	Gln	Leu	Val	Ile	Arg
		100						105					110		
His	Thr	Ala	Glu	Asp	Thr	Trp	Glu	Leu	Leu	Ile	Arg	Arg	Ser	Phe	Ser
		115					120					125			
Asp	Tyr	Trp	Trp	Leu	Trp	Leu	Gln	Asp	Ala	Ala	Ala				
	130					135					140				

<210> 1407

<211> 1006

<212> DNA

<213> Homo sapiens

<400> 1407

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240
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720
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<210> 1408

<211> 335

<212> PRT

<213> Homo sapiens

<400> 1408

Xaa Gly Arg Glu Lys Leu Glu Leu Val Leu Ser Asn Leu Gln Ala Asp
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 20 25 30
 Asp Ser Ala Asn Ala Lys Thr Leu Leu Glu Ala Ala Ser Lys Phe Gln
 35 40 45
 Phe His Thr Phe Cys Lys Val Cys Val Ser Phe Leu Glu Lys Gln Leu
 50 55 60
 Thr Ala Ser Asn Cys Leu Gly Val Ala Ala Met Ala Glu Ala Met Gln
 65 70 75 80
 Cys Ser Glu Leu Tyr His Xaa Ala Lys Ala Phe Ala Leu Gln Ile Phe
 85 90 95
 Pro Glu Val Ala Ala Gln Glu Glu Ile Leu Ser Ile Ser Lys Asp Asp
 100 105 110
 Phe Ile Ala Tyr Val Ser Asn Asp Ser Leu Asn Thr Lys Ala Glu Glu
 115 120 125
 Leu Val Tyr Glu Thr Val Ile Lys Trp Ile Lys Lys Asp Pro Ala Thr
 130 135 140
 Arg Thr Gln Tyr Ala Ala Glu Leu Leu Ala Val Val Arg Leu Pro Phe
 145 150 155 160
 Ile His Pro Ser Tyr Leu Leu Asn Val Val Asp Asn Glu Glu Leu Ile
 165 170 175
 Lys Ser Ser Glu Ala Cys Arg Asp Leu Val Asn Glu Ala Lys Arg Tyr
 180 185 190
 His Met Leu Pro His Ala Arg Gln Glu Met Gln Thr Pro Arg Thr Arg
 195 200 205
 Pro Arg Leu Ser Ala Gly Val Ala Glu Val Ile Val Leu Val Gly Gly
 210 215 220
 Arg Gln Met Val Gly Met Thr Gln Arg Ser Leu Val Ala Val Thr Cys
 225 230 235 240
 Trp Asn Pro Gln Asn Asn Lys Trp Tyr Pro Leu Ala Ser Val Pro Phe
 245 250 255
 Leu Gly Pro Gly Phe Phe Ser Val Val Ser Ala Gly Ala Asn Ile Tyr
 260 265 270
 Leu Ser Gly Gly Met Glu Ser Gly Val Pro Leu Ala Asp Val Trp Cys
 275 280 285
 Tyr Met Ser Leu Leu Asp Asn Trp Asn Leu Val Ser Arg Met Pro Val
 290 295 300
 Pro Arg Cys Arg Pro His Ser Leu Val Tyr Asp Gly Lys Ile Tyr Thr
 305 310 315 320
 Leu Gly Gly Leu Gly Val Ala Gly Asn Val Asp His Val Glu Arg
 325 330 335

<210> 1409

<211> 279

<212> DNA

<213> Homo sapiens

<400> 1409

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 120

cacgaccaac aggccgcaat cgctcgagcgc gcgctggagg ccggcggttac gcaaatgctg
 180
 ctgacaggca ccagcctggc ggtcagcgaa caagccctgg aactgtgcca tcaactggat
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 279

<210> 1410
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 1410
 Xaa Met Lys Phe Leu Val Phe Ser Glu Lys Arg Ala Phe Cys Tyr Ala
 1 5 10 15
 Gly Arg Pro Ala Ala Arg Asp Ser Thr Met Gln Leu Ile Asp Ile Gly
 20 25 30
 Val Asn Leu Thr Asn Ser Ser Phe His Asp Gln Gln Ala Ala Ile Val
 35 40 45
 Glu Arg Ala Leu Glu Ala Gly Val Thr Gln Met Leu Leu Thr Gly Thr
 50 55 60
 Ser Leu Ala Val Ser Glu Gln Ala Leu Glu Leu Cys His Gln Leu Asp
 65 70 75 80
 Ala Ser Gly Ala His Leu Phe Ala Thr Ala Gly Val His
 85 90

<210> 1411
 <211> 321
 <212> DNA
 <213> Homo sapiens

<400> 1411
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 120
 gattttcaat ctatttctta ctattccgcg ccaaaaagca tgaaggataa gcctaagtcg
 180
 ttagacgaag tcgatcctga attgttacgt acttatgaaa aactgggcat tcctctcata
 240
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 300
 actacttttc gtcaaaaagct t
 321

<210> 1412
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 1412
 Xaa Arg Ile Ser Gly Met Lys Asn Glu Pro Glu Trp Met Leu Glu Trp
 1 5 10 15
 Arg Leu Ser Ala Phe Arg Glu Trp Leu Glu Met Glu Glu Pro Ser Trp

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<210> 1413
<211> 385
<212> DNA
<213> Homo sapiens
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<210> 1414
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<213> Homo sapiens
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<210> 1415
<211> 420
<212> DNA
<213> Homo sapiens
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1196

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60
gtaactgtcc ttgtcatctg tcttgcatgat ttagaagagg aatcagaaaag ctgggacaac
120
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240
aagctgccag tcttcaagtc cctccggcac atgaggcagg tcttgggtgc cccttcttct
300
cgcattgctgg cctggcacgt tctcatgggg aaccagggtga tctggaaaag cagagacgtg
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420

<210> 1416
<211> 123
<212> PRT
<213> Homo sapiens

<400> 1416
Met Arg Leu Phe Val Pro Val Thr Val Leu Val Ile Cys Leu Ala Asp
1 5 10 15
Leu Glu Glu Glu Ser Glu Ser Trp Asp Asn Ser Glu Ala Glu Glu Glu
20 25 30
Glu Lys Ala Pro Val Leu Pro Glu Ser Thr Glu Gly Arg Glu Leu Thr
35 40 45
Gln Gly Pro Ala Glu Ser Ser Ser Leu Ser Gly Cys Gly Ser Trp Gln
50 55 60
Pro Arg Lys Leu Pro Val Phe Lys Ser Leu Arg His Met Arg Gln Val
65 70 75 80
Leu Gly Ala Pro Ser Phe Arg Met Leu Ala Trp His Val Leu Met Gly
85 90 95
Asn Gln Val Ile Trp Lys Ser Arg Asp Val Asp Leu Val Gln Ser Ala
100 105 110
Phe Glu Val Leu Arg Val Arg Thr Ser Phe Pro
115 120

<210> 1417
<211> 5058
<212> DNA
<213> Homo sapiens

<400> 1417
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120
taggagggtg gccaccccat ttccagtgtg acctgttccc attcccccat gtctcctccc
180
atccctcccg ccactcagct caggctgatg agaagcagag caacgggtgt atcgggtgtt
240
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300

cccgccctct tttgtcctct tcccagggtc cctggcccct tcggagaaac gcacttggtt
360
cgggccagcc gcctgagggg acgggctcac gtctgtcctt cacttgagag ctgctgggac
420
gtggagcttc cccagggagc cagggggact tttgccgag ccatgaaggg ggcacgtgg
480
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540
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<210> 1418

<211> 1532

<212> PRT

<213> Homo sapiens

<400> 1418

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Met Lys Gly Ala Arg Trp Arg Arg Val Pro Trp Val Ser Leu Ser Cys
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      20          25          30
Thr Leu Ile Thr Gly Ser Lys Thr Pro Ala Pro Val Thr Ser Thr Gly
      35          40          45
Ser Thr Thr Ala Thr Leu Glu Gly Gln Ser Thr Ala Ala Ser Ser Arg
      50          55          60
Thr Ser Asn Gln Asp Ile Ser Ala Ser Ser Gln Asn His Gln Thr Lys
65          70          75          80
Ser Thr Glu Thr Thr Ser Lys Ala Gln Thr Asp Thr Leu Thr Gln Met
      85          90          95
Met Thr Ser Thr Leu Phe Ser Ser Pro Ser Val His Asn Val Met Glu
      100          105          110
Thr Val Thr Gln Glu Thr Ala Pro Pro Asp Glu Met Thr Thr Ser Phe
      115          120          125
Pro Ser Ser Val Thr Asn Thr Leu Met Met Thr Ser Lys Thr Ile Thr
      130          135          140
Met Thr Thr Ser Thr Asp Ser Thr Leu Gly Asn Thr Glu Glu Thr Ser
145          150          155          160
Thr Ala Gly Thr Glu Ser Ser Thr Pro Val Thr Ser Ala Val Ser Ile
      165          170          175
Thr Ala Gly Gln Glu Gly Gln Ser Arg Lys Thr Ser Trp Arg Thr Ser
      180          185          190
Ile Gln Asp Thr Ser Ala Ser Ser Gln Asn His Trp Thr Arg Ser Thr
      195          200          205
Gln Thr Thr Arg Glu Ser Gln Thr Ser Thr Leu Thr His Arg Thr Thr
      210          215          220
Ser Thr Pro Ser Phe Ser Pro Ser Val His Asn Val Thr Gly Thr Val
225          230          235          240
Ser Gln Lys Thr Ser Pro Ser Gly Glu Thr Ala Thr Ser Ser Leu Cys
      245          250          255
Ser Val Thr Asn Thr Ser Met Met Thr Ser Glu Lys Ile Thr Val Thr
      260          265          270
Thr Ser Thr Gly Ser Thr Leu Gly Asn Pro Gly Glu Thr Ser Ser Val
      275          280          285
Pro Val Thr Gly Ser Leu Met Pro Val Thr Ser Ala Ala Leu Val Thr
      290          295          300
Val Asp Pro Glu Gly Gln Ser Pro Ala Thr Phe Ser Arg Thr Ser Thr
305          310          315          320
Gln Asp Thr Thr Ala Phe Ser Lys Asn His Gln Thr Gln Ser Val Glu
      325          330          335
Thr Thr Arg Val Ser Gln Ile Asn Thr Leu Asn Thr Leu Thr Pro Val
      340          345          350
Thr Thr Ser Thr Val Leu Ser Ser Pro Ser Gly Phe Asn Pro Ser Gly
      355          360          365
Thr Val Ser Gln Glu Thr Phe Pro Ser Gly Glu Thr Thr Ile Ser Ser
      370          375          380
Pro Ser Ser Val Ser Asn Thr Phe Leu Val Thr Ser Lys Val Phe Arg

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385					390					395				400
Met	Pro	Ile	Ser	Arg	Asp	Ser	Thr	Leu	Gly	Asn	Thr	Glu	Glu	Thr
				405					410					415
Leu	Ser	Val	Ser	Gly	Thr	Ile	Ser	Ala	Ile	Thr	Ser	Lys	Val	Ser
				420					425					430
Ile	Trp	Trp	Ser	Asp	Thr	Leu	Ser	Thr	Ala	Leu	Ser	Pro	Ser	Ser
				435					440					445
Pro	Pro	Lys	Ile	Ser	Thr	Ala	Phe	His	Thr	Gln	Gln	Ser	Glu	Gly
									455					460
Glu	Thr	Thr	Gly	Arg	Pro	His	Glu	Arg	Ser	Ser	Phe	Ser	Pro	Gly
									470					480
Ser	Gln	Glu	Ile	Phe	Thr	Leu	His	Glu	Thr	Thr	Thr	Trp	Pro	Ser
									485					495
Phe	Ser	Ser	Lys	Gly	His	Thr	Thr	Trp	Ser	Gln	Thr	Glu	Leu	Pro
									500					510
Thr	Ser	Thr	Gly	Ala	Ala	Thr	Arg	Leu	Val	Thr	Gly	Asn	Pro	Ser
									515					525
Gly	Ala	Ala	Gly	Thr	Ile	Pro	Arg	Val	Pro	Ser	Lys	Val	Ser	Ala
									530					540
Gly	Glu	Pro	Gly	Glu	Pro	Thr	Thr	Tyr	Ser	Ser	His	Ser	Thr	Thr
									545					560
Pro	Lys	Thr	Thr	Gly	Ala	Gly	Ala	Gln	Thr	Gln	Trp	Thr	Gln	Glu
									555					575
Gly	Thr	Thr	Gly	Glu	Ala	Leu	Leu	Ser	Ser	Pro	Ser	Tyr	Ser	Val
									565					590
Gln	Met	Ile	Lys	Thr	Ala	Thr	Ser	Pro	Ser	Ser	Ser	Pro	Met	Leu
									580					600
Arg	His	Thr	Ser	Gln	Gln	Ile	Thr	Thr	Ala	Pro	Ser	Thr	Asn	His
									595					610
Thr	Ile	His	Ser	Thr	Ser	Thr	Ser	Pro	Gln	Glu	Ser	Pro	Ala	Val
									615					640
Gln	Arg	Gly	His	Thr	Gln	Ala	Pro	Gln	Thr	Thr	Gln	Glu	Ser	Gln
									625					655
Thr	Arg	Ser	Val	Ser	Pro	Met	Thr	Asp	Thr	Lys	Thr	Val	Thr	Thr
									630					670
Gly	Ser	Ser	Phe	Thr	Ala	Ser	Gly	His	Ser	Pro	Ser	Glu	Ile	Val
									645					685
Gln	Asp	Ala	Pro	Thr	Ile	Ser	Ala	Ala	Thr	Thr	Phe	Ala	Pro	Ala
									660					700
Thr	Gly	Asp	Gly	His	Thr	Gln	Ala	Pro	Thr	Thr	Ala	Leu	Gln	Ala
									675					720
Thr	Pro	Ser	Ser	His	Asp	Ala	Thr	Leu	Gly	Pro	Ser	Gly	Gly	Thr
									690					735
Leu	Ser	Lys	Thr	Gly	Ala	Leu	Thr	Leu	Ala	Asn	Ser	Val	Val	Ser
									705					750
Pro	Gly	Gly	Pro	Glu	Gly	Gln	Trp	Thr	Ser	Ala	Ser	Ala	Ser	Thr
									710					765
Pro	Asp	Thr	Ala	Ala	Ala	Met	Thr	His	Thr	His	Gln	Ala	Glu	Ser
									715					780
Glu	Ala	Ser	Gly	Gln	Thr	Gln	Thr	Ser	Glu	Pro	Ala	Ser	Ser	Gly
									725					800
Arg	Thr	Thr	Ser	Ala	Gly	Thr	Ala	Thr	Pro	Ser	Ser	Ser	Gly	Ala
									730					815
Gly	Thr	Thr	Pro	Ser	Gly	Ser	Glu	Gly	Ile	Ser	Thr	Ser	Gly	Glu

1203

1250	1255	1260
Gly His Ala Thr Pro Leu His Val Thr Asp Ala Ser Ser Val Ser Thr		
1265	1270	1275
Gly Asp Thr Thr Pro Leu Pro Val Thr Ser Pro Ser Ser Ala Ser Thr		1280
	1285	1290
Gly Asp Thr Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr		1295
	1300	1305
Gly Asp Thr Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Val Ser Thr		1310
	1315	1320
Ser His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr		1325
	1330	1335
Ser His Ala Thr Ser Leu Pro Val Thr Asp Pro Ser Ser Ala Ser Thr		1340
1345	1350	1355
Gly Asp Thr Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr		1360
	1365	1370
Gly His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1375
	1380	1385
Gly Asp Thr Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1390
	1395	1400
Gly His Ala Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1405
	1410	1415
Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr		1420
1425	1430	1435
Gly His Thr Thr Pro Leu His Val Thr Ser Pro Ser Ser Ala Ser Thr		1440
	1445	1450
Gly His Ala Thr Pro Leu Pro Val Thr Ser Pro Ser Ser Ala Ser Thr		1455
	1460	1465
Ser His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1470
	1475	1480
Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr		1485
	1490	1495
Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr		1500
1505	1510	1515
Gly His Ala Thr Pro Leu Pro Val Thr Asp Thr Ser		1520
	1525	1530

<210> 1419

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1419

aaggctatgg gaattcaaaa gtatgtgttc tattccatcc acaactgtga caagcagcct
60gaggttcct tgaaggaaat caagtattgt actggtaaatt ttattcagga cagtggctctg
120gattatatca tcatccgttt gtgtgggttc atgcaggggc ttattgggca atatgctgtt
180cctatactag aagagaagtc cgtctgggga actgatgctc caactcggat tgcttacatg
240gataccagg acgtagctcg actaacgttt atagctatgc ggaatgagaa ggccaacaag
300

aaactcatg

309

<210> 1420

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1420

```

Lys Ala Met Gly Ile Gln Lys Tyr Val Phe Tyr Ser Ile His Asn Cys
 1             5             10             15
Asp Lys Gln Pro Glu Val Pro Leu Met Glu Ile Lys Tyr Cys Thr Gly
      20             25             30
Lys Phe Ile Gln Asp Ser Gly Leu Asp Tyr Ile Ile Ile Arg Leu Cys
      35             40             45
Gly Phe Met Gln Gly Leu Ile Gly Gln Tyr Ala Val Pro Ile Leu Glu
      50             55             60
Glu Lys Ser Val Trp Gly Thr Asp Ala Pro Thr Arg Ile Ala Tyr Met
65             70             75             80
Asp Thr Gln Asp Val Ala Arg Leu Thr Phe Ile Ala Met Arg Asn Glu
      85             90             95
Lys Ala Asn Lys Lys Leu Met
      100

```

<210> 1421

<211> 385

<212> DNA

<213> Homo sapiens

<400> 1421

```

ccatggcggc atgggtggag agagaagctg gggagaagaa atgatgcaga gatctcgcca
60
ggccagggag ctgggctggg cagccaggag tagagaaaca acgctcccag aggaggggag
120
gatgttagag caaagccgag cccagctgct ggcaaatgca tctgtgatgc ccatgagcag
180
ccaggatttc agctccgctc tacttcttga ctgctgcaga actcagcacc agctccagt
240
ccctcagagc cctgattttt cacaaccga ctctccaag cctcccctgt gggcgggata
300
cacaagccag agtcgcttg tcacatctct tctctctcca ccaggtcatg ggcaaacctt
360
cctgacatac tttagacat tacag
385

```

<210> 1422

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1422

```

Met Gly Gly Glu Arg Ser Trp Gly Glu Glu Met Met Gln Arg Ser Arg
 1             5             10             15
Gln Ala Arg Glu Leu Gly Trp Ala Ala Arg Ser Arg Glu Thr Thr Leu
      20             25             30
Pro Glu Glu Gly Arg Met Leu Glu Gln Ser Arg Ala Gln Leu Leu Ala

```

```

      35              40              45
Asn Ala Ser Val Met Pro Met Ser Ser Gln Asp Phe Ser Ser Ala Leu
  50              55              60
Leu Leu Asp Cys Cys Arg Thr Gln His Gln Leu Gln Cys Pro Gln Ser
  65              70              75              80
Pro Asp Phe Ser Gln Thr Asp Ser Ser Lys Pro Pro Leu Trp Ala Gly
      85              90              95
Tyr Thr Ser Gln Ser Arg Leu Val Thr Ser Leu Leu Ser Pro Pro Gly
      100              105              110
His Gly Gln Thr Phe Leu Thr Tyr Phe Thr Thr Leu Gln
      115              120              125

```

<210> 1423

<211> 336

<212> DNA

<213> Homo sapiens

<400> 1423

```

nntattcttc aatccttcca caatgtgcaa caaatggcga ttgactggct cactcgaaat
60
ctctatcttg tggaccatgt cggtgaccgg atctttgttt gtaattccaa cggttctgta
120
tgtgtcaccc tgattgatct ggagcttcac aatcctaaag caatagcagt agatccaata
180
gcaggaaaac ttttctttac tgactacggg aatgtcgcca aagtggagag atgtgacatg
240
gatgggatga accgaacaag gataattgat tcaaagacag agcagccagc tgcactggca
300
ctagacctag tcaacaaatt ggtttactgg gtagat
336

```

<210> 1424

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1424

```

Xaa Ile Leu Gln Ser Phe His Asn Val Gln Gln Met Ala Ile Asp Trp
  1              5              10              15
Leu Thr Arg Asn Leu Tyr Phe Val Asp His Val Gly Asp Arg Ile Phe
      20              25              30
Val Cys Asn Ser Asn Gly Ser Val Cys Val Thr Leu Ile Asp Leu Glu
      35              40              45
Leu His Asn Pro Lys Ala Ile Ala Val Asp Pro Ile Ala Gly Lys Leu
      50              55              60
Phe Phe Thr Asp Tyr Gly Asn Val Ala Lys Val Glu Arg Cys Asp Met
      65              70              75              80
Asp Gly Met Asn Arg Thr Arg Ile Ile Asp Ser Lys Thr Glu Gln Pro
      85              90              95
Ala Ala Leu Ala Leu Asp Leu Val Asn Lys Leu Val Tyr Trp Val Asp
      100              105              110

```

<210> 1425

<211> 672

<212> DNA

<213> Homo sapiens

<400> 1425

accggtgttt tcgatcacct gggcggttg agtgactatc gcagtcagat cggccccgatg
60
gccccgcatg tcgaagacct ggccttggcg ctacaggtca ttgccggtga agatggggtc
120
gatgccgggg tgattccgat gccgctgcgc cgtatgcaaa ctcaaacgct gaaggggttg
180
cgagtcgcct ggtacagcga tggtagcatt gagcccgttg acgcgctcac gcacaccaca
240
ttgcaggcgg tcgccgatct attggacgct gaaggcgcct tgatccgccc ggccttcccc
300
tcggcggttg gcaatgcccg tgacattacc gaacgctatt gggcaatgag tcaaagctcc
360
ggcgcgcatg cgatccagct gttttcagat tgggacagt tccgtacagc catgctgggg
420
ttcatggccg actacgacat taccctgtgc cctgtcgatg ccgcgccggc gacccaactg
480
ggagagacgc ggccagggct gttcagttcc ccccttccca atggcttggc gggttggcct
540
tgtgtggtgg tccgggcccg aacggatagc gcggttttgc cgggtggcgt gcagattgtc
600
gcgcgacctt ggcacgagcc tgtcgcgttg gcggcagcag cggccattga gcgcgcgctg
660
ccgttcacgc gt
672

<210> 1426

<211> 224

<212> PRT

<213> Homo sapiens

<400> 1426

Thr	Gly	Val	Phe	Asp	His	Leu	Gly	Gly	Leu	Ser	Asp	Tyr	Arg	Ser	Gln
1				5					10					15	
Ile	Gly	Pro	Met	Ala	Arg	His	Val	Glu	Asp	Leu	Ala	Leu	Ala	Leu	Gln
		20						25				30			
Val	Ile	Ala	Gly	Glu	Asp	Gly	Val	Asp	Ala	Gly	Val	Ile	Pro	Met	Pro
	35					40					45				
Leu	Arg	Arg	Met	Gln	Thr	Gln	Thr	Leu	Lys	Gly	Leu	Arg	Val	Ala	Trp
	50				55					60					
Tyr	Ser	Asp	Gly	Gly	Ile	Glu	Pro	Val	Asp	Ala	Leu	Thr	His	Thr	Thr
65				70					75					80	
Leu	Gln	Ala	Val	Ala	Asp	Leu	Leu	Asp	Ala	Glu	Gly	Ala	Leu	Ile	Arg
		85						90					95		
Pro	Ala	Phe	Pro	Ser	Ala	Leu	Ser	Asn	Ala	Arg	Asp	Ile	Thr	Glu	Arg
	100						105				110				
Tyr	Trp	Ala	Met	Ser	Gln	Ser	Ser	Gly	Ala	Gln	Ser	Ile	Gln	Leu	Phe
	115				120						125				
Ser	Asp	Trp	Asp	Gln	Phe	Arg	Thr	Ala	Met	Leu	Gly	Phe	Met	Ala	Asp
	130				135					140					
Tyr	Asp	Ile	Ile	Leu	Cys	Pro	Val	Asp	Ala	Ala	Pro	Ala	Thr	Gln	Leu

```

145          150          155          160
Gly Glu Thr Arg Pro Gly Leu Phe Ser Ser Pro Leu Pro Asn Gly Leu
          165          170          175
Ala Gly Trp Pro Cys Val Val Val Arg Ala Gly Thr Asp Ser Ala Gly
          180          185          190
Leu Pro Val Gly Val Gln Ile Val Ala Arg Pro Trp His Glu Pro Val
          195          200          205
Ala Leu Ala Ala Ala Ala Ala Ile Glu Arg Ala Leu Pro Phe Thr Arg
          210          215          220

```

<210> 1427

<211> 270

<212> DNA

<213> Homo sapiens

<400> 1427

```

atggcttgct atctgaagca ggtggctgcc accgtctgca taaatgggcc cagcgcagtc
60
tttgatgttc cactaagata cggggatctg gtgggtgacac ccatgcgact ggcttcggaa
120
ttgatgcaag tccatccctc aggggctgta cgcttccgtc actgttcagt tccccagaat
180
aaactcaact cacaaaagat acttccggtg gaaaaggccc aagggaagat cctcttcatt
240
gcaggagaga atgacgaaag cttggctagc
270

```

<210> 1428

<211> 90

<212> PRT

<213> Homo sapiens

<400> 1428

```

Met Ala Cys Tyr Leu Lys Gln Val Ala Ala Thr Val Cys Ile Asn Gly
 1          5          10          15
Pro Ser Ala Val Phe Asp Val Pro Leu Arg Tyr Gly Asp Leu Val Val
          20          25          30
Thr Pro Met Arg Leu Ala Ser Glu Leu Met Gln Val His Pro Ser Gly
          35          40          45
Ala Val Arg Phe Arg His Cys Ser Val Pro Gln Asn Lys Leu Asn Ser
          50          55          60
Gln Lys Ile Leu Pro Val Glu Lys Ala Gln Gly Lys Ile Leu Phe Ile
65          70          75          80
Ala Gly Glu Asn Asp Glu Ser Leu Ala Ser
          85          90

```

<210> 1429

<211> 384

<212> DNA

<213> Homo sapiens

<400> 1429

```

ncctagggga ttatcgacat aaacgcgact gcgtaagggt ggtgactcat cccccagcga
60

```

catgaggcaa acgccatgac atccgagaat gcaccgccgc gaggcaagat catcatgatg
 120
 gcggtgatcg ccggcgcggt ggtcaccaac atttactgca cccagccggt gctgccgttg
 180
 atcgccctcg acatgggcgt cgcagtgtcg acggtcaacc tgggtggcagg cgcggccttg
 240
 ctggggtttg ccaccgggtt ggcgttttta ttgcccatgg gcgaccgctt tgaccggcgc
 300
 aagctggtac tcgggcagat tgcgctggcg ttctgctttg ccttggcggc ggcttttgcg
 360
 ccgaggatct gggcggtgat cggc
 384

<210> 1430

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1430

Met	Thr	Ser	Glu	Asn	Ala	Pro	Pro	Arg	Gly	Lys	Ile	Ile	Met	Met	Ala
1				5					10					15	
Val	Ile	Ala	Gly	Ala	Val	Val	Thr	Asn	Ile	Tyr	Cys	Thr	Gln	Pro	Val
		20						25					30		
Leu	Pro	Leu	Ile	Ala	Ser	Asp	Met	Gly	Val	Ala	Val	Ser	Thr	Val	Asn
		35					40					45			
Leu	Val	Ala	Gly	Ala	Ala	Leu	Leu	Gly	Phe	Ala	Thr	Gly	Leu	Ala	Phe
		50				55					60				
Leu	Leu	Pro	Met	Gly	Asp	Arg	Phe	Asp	Arg	Arg	Lys	Leu	Val	Leu	Gly
65				70				75					80		
Gln	Ile	Ala	Leu	Ala	Phe	Cys	Phe	Ala	Leu	Ala	Ala	Ala	Phe	Ala	Pro
			85					90					95		
Arg	Ile	Trp	Ala	Leu	Ile	Gly									
						100									

<210> 1431

<211> 414

<212> DNA

<213> Homo sapiens

<400> 1431

aagcttcagg gcagggtgcc cctgaagtca agcctgattc tgcacatct tgtatagcac
 60
 aaactggcga cacctgtgac tttgcctttc ccagggtccc tgcctccgc tccaggtagg
 120
 ctacgcctga gggagggtgct ggcaggagcc tcggaggcag gaggggctgg cgtgcttcac
 180
 tccttcagct tgtcttgga gagctgtggg ctgcatcccc ctggctcctc gtcccacagg
 240
 cagccccgct gtgtgtctgg tcttgacagg tggctgcagc ttctgggccc tgcttcacg
 300
 ccctcttccc atgacacctc agccttgga ggtgtaatag tttcccatgt tgctgatctt
 360
 tagtttgcct ccctctcctt ggctgttctt tctgctgttc catcctctgt gcac
 414

<210> 1432
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1432
 Met Gly Asn Tyr Tyr Thr Phe Gln Gly Trp Arg Ile Met Gly Arg Gly
 1 5 10 15
 Ala Gly Ser Arg Ala Gln Lys Leu Gln Pro Thr Cys Lys Thr Arg His
 20 25 30
 Thr Ala Gly Leu Pro Val Gly Arg Gly Ala Arg Gly Met Gln Pro Thr
 35 40 45
 Ala Leu Pro Arg Gln Ala Glu Gly Val Lys His Ala Ser Pro Ser Cys
 50 55 60
 Leu Arg Gly Ser Cys Gln His Leu Pro Gln Ala Glu Pro Thr Trp Ser
 65 70 75 80
 Gly Glu Gln Gly Pro Trp Glu Arg Gln Ser His Arg Cys Arg Gln Phe
 85 90 95
 Val Leu Tyr Lys Met Met Gln Asn Gln Ala
 100 105

<210> 1433
 <211> 294
 <212> DNA
 <213> Homo sapiens

<400> 1433
 aaattttcga tgggaactggg cggcaatgca ccgtttattg tatttgatga tgcggatgtg
 60
 gacgcgggccg tcagcaatgc tgtggcttgc aagttccgct gtggtggaca aacgtgcatt
 120
 tcggccaacc gaatctacgt gcacgaacaa gtgcacgacg agtttgtctc taagtttggc
 180
 gagagagtca agaagcttcg cgtggggtac ggtctggacg aaaacatcaa cattggaccg
 240
 ctagtgaatg aggctagtca ggacaaagca gagtcacatg tccgtgcgat gcaa
 294

<210> 1434
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1434
 Lys Phe Ser Met Glu Leu Gly Gly Asn Ala Pro Phe Ile Val Phe Asp
 1 5 10 15
 Asp Ala Asp Val Asp Ala Ala Val Ser Asn Ala Val Ala Cys Lys Phe
 20 25 30
 Arg Cys Gly Gly Gln Thr Cys Ile Ser Ala Asn Arg Ile Tyr Val His
 35 40 45
 Glu Gln Val His Asp Glu Phe Val Ser Lys Phe Gly Glu Arg Val Lys
 50 55 60
 Lys Leu Arg Val Gly Tyr Gly Leu Asp Glu Asn Ile Asn Ile Gly Pro

```
<210> 1435
<211> 1772
<212> DNA
<213> Homo sapiens
```

1211

gtgtgcccac cgctgctctg ccagaacccc tcacgcaccc aggattcctg ctgcccacag
 1320
 tgtacagatc aaccttttcg gccttccttg tcccgcaata acagcgtacc taattactgc
 1380
 aaaaatgatg aaggggatat attcctggca gctgagtcct ggaagcctga cgtttgatcc
 1440
 agctgcatct gcattgatag cgtaattagc tgtttctctg agtcctgccc ttctgtatcc
 1500
 tgtgaaaaac ctgtcttgag aaaaggccag tgttgtccct actgcataga agacacaatt
 1560
 ccaaagaagg tgggtgtgcca cttcagtggg aaggcctatg ccgacgagga gcggtgggac
 1620
 cttgacagct gcacccactg ctactgcctg cagggccaga cttctgctc gaccgtcagc
 1680
 tgccccctc tgccctgtgt tgagcccatc aacgtggaag gaagttgctg cccaatgtgt
 1740
 ccagaaatgt atgtcccagt cccttcacgc gt
 1772

<210> 1436

<211> 322

<212> PRT

<213> Homo sapiens

<400> 1436

Xaa	Ser	Gly	Leu	Cys	Gly	Phe	Pro	Val	Cys	Glu	Val	Gly	Ser	Thr	Pro
1				5					10					15	
Arg	Ile	Val	Ser	Arg	Gly	Asp	Gly	Thr	Pro	Gly	Lys	Cys	Cys	Asp	Val
			20					25					30		
Phe	Glu	Cys	Val	Asn	Asp	Thr	Lys	Pro	Ala	Cys	Val	Phe	Asn	Asn	Val
		35					40					45			
Glu	Tyr	Tyr	Asp	Gly	Asp	Met	Phe	Arg	Met	Asp	Asn	Cys	Arg	Phe	Cys
	50					55					60				
Arg	Cys	Gln	Gly	Gly	Val	Ala	Ile	Cys	Phe	Thr	Ala	Gln	Cys	Gly	Glu
65					70					75				80	
Ile	Asn	Cys	Glu	Arg	Tyr	Tyr	Val	Pro	Glu	Gly	Glu	Cys	Cys	Pro	Val
			85					90						95	
Cys	Glu	Ile	Gln	Cys	Ile	Leu	Leu	Ile	Ile	Pro	Leu	Ala	Ala	Ala	Asn
		100						105					110		
Gly	Leu	Ile	Leu	Ala	His	Gly	Asp	Arg	Trp	Arg	Glu	Asp	Asp	Cys	Thr
	115					120					125				
Phe	Cys	Gln	Cys	Val	Asn	Gly	Glu	Arg	His	Cys	Val	Ala	Thr	Val	Cys
	130					135					140				
Gly	Gln	Thr	Cys	Thr	Asn	Pro	Val	Lys	Val	Pro	Gly	Glu	Cys	Cys	Pro
145					150					155					160
Val	Cys	Glu	Glu	Pro	Thr	Ile	Ile	Thr	Val	Asp	Pro	Pro	Ala	Cys	Gly
			165					170						175	
Glu	Leu	Ser	Asn	Cys	Thr	Leu	Thr	Gly	Lys	Asp	Cys	Ile	Asn	Gly	Phe
		180						185					190		
Lys	Arg	Asp	His	Asn	Gly	Cys	Arg	Thr	Cys	Gln	Cys	Ile	Asn	Thr	Glu
	195					200						205			
Glu	Leu	Cys	Ser	Glu	Arg	Lys	Gln	Gly	Cys	Thr	Leu	Asn	Cys	Pro	Phe
	210					215						220			
Gly	Phe	Leu	Thr	Asp	Ala	Gln	Asn	Cys	Glu	Ile	Cys	Glu	Cys	Arg	Pro


```

225          230          235          240
Arg Pro Lys Lys Cys Arg Pro Ile Ile Cys Asp Lys Tyr Cys Pro Leu
          245          250          255
Gly Leu Leu Lys Asn Lys His Gly Cys Asp Ile Cys Arg Cys Lys Lys
          260          265          270
Cys Pro Glu Leu Ser Cys Ser Lys Xaa Leu Pro Leu Gly Phe Pro Ala
          275          280          285
Gly Gln Ser Arg Leu Ser Tyr Leu Gln Val Gln Arg Gly Leu Cys Phe
          290          295          300
Ser Trp Ala Thr His Pro Val Gly His Leu Ser His Arg Gly Trp Ser
305          310          315          320
Ser Ser

```

<210> 1437

<211> 372

<212> DNA

<213> Homo sapiens

<400> 1437

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cgggaactgt gctcgccac catccggtga ccggtgtcgg gcagtggcaa ctcaacaccc
60
aggccatgac cggagccatc ccgagcagca ggtgcacggc ccgggccggt gactcgtgga
120
ccgtaccct catgacctcg atgcaacttc cacggtggtc caccgatcac atcgaccgct
180
cgggccatgt cgatgctgag cagttcgacc ggttgcgcag cgagttcctg tcccgtgggc
240
acagttcttg ccctgccgca catgggggtcc tgggacttgg ccggggcctg ggtggccaga
300
cgcggttct ccccgagttc cgtcgaggag aatcttccga gggcacagtt cgagttgttc
360
tgccgcacgc gt
372

```

<210> 1438

<211> 62

<212> PRT

<213> Homo sapiens

<400> 1438

```

Met Ser Met Leu Ser Ser Ser Thr Gly Cys Ala Ala Ser Ser Cys Pro
1          5          10          15
Val Gly Thr Val Leu Ala Leu Pro His Met Gly Ser Trp Asp Leu Ala
          20          25          30
Gly Ala Trp Val Ala Arg Arg Gly Phe Ser Pro Ser Ser Val Ala Glu
          35          40          45
Asn Leu Pro Arg Ala Gln Phe Glu Leu Phe Cys Arg Thr Arg
50          55          60

```

<210> 1439

<211> 471

<212> DNA

<213> Homo sapiens

<400> 1439

accggtttgc tttccacaag gagagctaaa atgccggttg ctaagcagca tacatgccgc
60
tgcttctttc cacaatgtag acttaaaaaa atcgccgtaa acattttacc atatgattga
120
gtcaggtgtg gggagtcgca gtaaaccattt taccatgtga ttgagtcatg ggtggggagt
180
cgcggaata cacagggcag gcagttcgt atcacgatgt tctctctcat ttctgtcttt
240
ggtctgtctt cctgggtaat gtcacatgga gaccaggagg atctgccatc agctgtgtgc
300
agtgggttaa caagacgacg gggaacttca gagtgcaggc agtcctcatc tttggcagat
360
tctgtatttg cacattcacc cactcactga aatgcatttg taaccccaaa atcaatacag
420
cggtttcaca gtcattttcc gacacgggca gaggggtgaa gatactgagt c
471

<210> 1440

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1440

Met	Gly	Gly	Glu	Ser	Arg	Lys	Tyr	Thr	Gly	Gln	Ala	Val	Arg	Tyr	His
1				5					10					15	
Asp	Val	Leu	Ser	His	Phe	Cys	Leu	Trp	Ser	Val	Phe	Leu	Gly	Asn	Val
			20					25					30		
Thr	Trp	Arg	Pro	Arg	Gly	Ser	Ala	Ile	Ser	Cys	Val	Gln	Trp	Val	Asn
			35				40					45			
Lys	Thr	Thr	Gly	Asn	Phe	Arg	Val	Gln	Ala	Val	Leu	Ile	Phe	Gly	Arg
	50				55				60						
Phe	Cys	Ile	Cys	Thr	Phe	Thr	His	Ser	Leu	Lys	Cys	Ile	Cys	Asn	Pro
65				70					75					80	
Lys	Ile	Asn	Thr	Ala	Val	Ser	Gln	Ser	Phe	Ser	Asp	Thr	Gly	Arg	Gly
			85				90						95		
Val	Lys	Ile	Leu	Ser											
			100												

<210> 1441

<211> 376

<212> DNA

<213> Homo sapiens

<400> 1441

nnngagtcgc ggggaccttc atggactctc tcgtgctccg tagctcacac tcaccgcacg
60
gcagctcaca ttcaccacac gggaactcac tctcaccaca cggcagctca ctctctctgc
120
accgcagctc acactcaccg cacggcagct cactctcacc gcacggcagc tcacactcac
180
cacacagcag ctactcttta ccggacgggg aacctaact taccggacgg gaagcctcac
240

tctcaccgca cggaaagctc acactcaccg caccgcagcc actctcaccg cacggcagct
 300
 cactctcacc gcaccgcagc tcactctcac cggacgggag ctactctca ccacacggca
 360
 cctcactctc acgcgt
 376

<210> 1442
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1442
 Xaa Glu Ser Arg Gly Pro Ser Trp Thr Leu Ser Cys Ser Val Ala His
 1 5 10 15
 Thr His Arg Thr Ala Ala His Ile His His Thr Gly Thr His Ser His
 20 25 30
 His Thr Ala Ala His Ser Leu Cys Thr Ala Ala His Thr His Arg Thr
 35 40 45
 Ala Ala His Ser His Arg Thr Ala Ala His Thr His His Thr Ala Ala
 50 55 60
 His Ser Tyr Arg Thr Gly Asn Leu Asn Leu Pro Asp Gly Lys Pro His
 65 70 75 80
 Ser His Arg Thr Glu Ser Ser His Ser Pro His Arg Ser His Ser His
 85 90 95
 Arg Thr Ala Ala His Ser His Arg Thr Ala Ala His Ser His Arg Thr
 100 105 110
 Gly Ala His Ser His His Thr Ala Pro His Ser His Ala
 115 120 125

<210> 1443
 <211> 286
 <212> DNA
 <213> Homo sapiens

<400> 1443
 atggcagccc tgcgtcccaa ggagctgccca caactaatgg tcgccatcgg caatgcgagc
 60
 ataaaaacgga caacacgctg cctgatcgaa tggcaactcc acaccatgac ccgtcctgcg
 120
 gaagccgcta cgacttcctg ggctgacatc gactgcgaca agaaaacctg gacgatccca
 180
 gcggagcgta tgaaaaagcg acgtgcccac gtcataccgc taaccgagca cgcacttgcc
 240
 ttgcttgaga caatcaaacc ctacagcggn cacagagagt acgcgt
 286

<210> 1444
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 1444
 Met Ala Ala Leu Arg Pro Lys Glu Leu Pro Gln Leu Met Val Ala Ile

```

      1           5           10           15
Gly Asn Ala Ser Ile Lys Arg Thr Thr Arg Cys Leu Ile Glu Trp Gln
      20           25           30
Leu His Thr Met Thr Arg Pro Ala Glu Ala Ala Thr Thr Ser Trp Ala
      35           40           45
Asp Ile Asp Cys Asp Lys Lys Thr Trp Thr Ile Pro Ala Glu Arg Met
      50           55           60
Lys Lys Arg Arg Ala His Val Ile Pro Leu Thr Glu His Ala Leu Ala
      65           70           75           80
Leu Leu Glu Thr Ile Lys Pro Tyr Ser Gly His Arg Glu Tyr Ala
      85           90           95

```

<210> 1445

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1445

```

naccggttca ccggggaggc cttcgatggg ggcaaggtca gcatggttgg cccgattccc
60
atgtacctgt atggcacctt cgtcgttccg gacttcgacg cattcatctc cggcaagcag
120
actccctacc gggagacggt ctccaagcgg accactactt ggttctttcg agccgggtca
180
gaggtttatg agctggccnt cccccgagga gtcgtgttcg ccatgcaaag cgcctcgttg
240
agggtggacc ccgacaacac cgtcgacaag ctgccaacac tcggcgagcg cctg
294

```

<210> 1446

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1446

```

Xaa Arg Phe Thr Gly Glu Ala Phe Asp Gly Gly Lys Val Ser Met Val
      1           5           10           15
Gly Pro Ile Pro Met Tyr Leu Tyr Gly Thr Phe Val Val Pro Asp Phe
      20           25           30
Asp Ala Phe Ile Ser Gly Lys Gln Thr Pro Tyr Arg Glu Thr Val Ser
      35           40           45
Lys Arg Thr Thr Thr Trp Phe Phe Arg Ala Gly Ser Glu Val Tyr Glu
      50           55           60
Leu Ala Xaa Pro Arg Gly Val Val Phe Ala Met Gln Ser Ala Ser Leu
      65           70           75           80
Arg Val Asp Pro Asp Asn Thr Val Asp Lys Leu Pro Thr Leu Gly Glu
      85           90           95
Arg Leu

```

<210> 1447

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1447

nnncagaacc agaagatcaa cctgcatgac ggctcgttct ccgacgttgg cggcatggtg
 60
 ggtaatatct ccattgccca ggggtgtcacg atcgagaacg ccgtcggcgg ttcggggcaac
 120
 gacctgctga tcggcaacga tgcggccaac gaactgcgcg gcggtgccgg caacgatatc
 180
 ctctacgggg ctggcgggtgc cgaccagggt tgggttggtt cgggcaacaa taccttcgtg
 240
 ttcgcgcgcg tttccgactc ggcgccgaaa ggcggccgacc ggatcatgga cttcaccagt
 300
 ggccaggaca agatcgatct gtccgggatc acccatgggt cgggcctgac cttcgtcaac
 360
 gcg
 363

<210> 1448

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1448

Xaa Gln Asn Gln Lys Ile Asn Leu His Asp Gly Ser Phe Ser Asp Val
 1 5 10 15
 Gly Gly Met Val Gly Asn Ile Ser Ile Ala Gln Gly Val Thr Ile Glu
 20 25 30
 Asn Ala Val Gly Gly Ser Gly Asn Asp Leu Leu Ile Gly Asn Asp Ala
 35 40 45
 Ala Asn Glu Leu Arg Gly Gly Ala Gly Asn Asp Ile Leu Tyr Gly Ala
 50 55 60
 Gly Gly Ala Asp Gln Val Trp Val Gly Ser Gly Asn Asn Thr Phe Val
 65 70 75 80
 Phe Ala Ala Val Ser Asp Ser Ala Pro Lys Ala Ala Asp Arg Ile Met
 85 90 95
 Asp Phe Thr Ser Gly Gln Asp Lys Ile Asp Leu Ser Gly Ile Thr His
 100 105 110
 Gly Ser Gly Leu Thr Phe Val Asn Ala
 115 120

<210> 1449

<211> 541

<212> DNA

<213> Homo sapiens

<400> 1449

aggcgctacc agattatggg ctgcccgacc tcaatgacat gcgcttgagc ctgcatgaat
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 cactcagcca atcgcgcttg gcgattgaac gctttatcca ggcgtacgag cctcggttgg
 120
 ggaatgtacg tgtcaggagg agggagggtg cctacaaccc tttggtactg gcgtttgtga
 180
 ttgaggcaac cgtcgtcatc gatgggtgtca tccaacctgt ggtgtttaac gcacacctgg
 240

tggggggggg gacgggtcga gtgtgttacc tgatgttctt tgagctcttt taccagagtg
 300
 aactcagtgc attgcgcacg cttggggcgc gtttttctga acgcaatccc gccctggcac
 360
 cctttcttgc cgattccagg ccaggaccgc gacgtcgagg gtctattgaa agtctttgcc
 420
 tttctccccg ggcgcctgcg ccagaagctt gctgacgagc ttctgaggtt gacccattca
 480
 ttgatgcact tgggtgtggc caattacatg cggccattgc cggccttcag tattttgcag
 540
 t
 541

<210> 1450
 <211> 138
 <212> PRT
 <213> Homo sapiens

<400> 1450
 Met Arg Leu Ser Leu His Glu Ser Leu Ser Gln Ser Arg Leu Ala Ile
 1 5 10 15
 Glu Arg Phe Ile Gln Ala Tyr Glu Pro Arg Leu Gly Asn Val Arg Val
 20 25 30
 Arg Arg Arg Glu Gly Ala Tyr Asn Pro Leu Val Leu Ala Phe Val Ile
 35 40 45
 Glu Ala Thr Val Val Ile Asp Gly Val Ile Gln Pro Val Val Phe Asn
 50 55 60
 Ala His Leu Val Gly Gly Gly Thr Gly Arg Val Cys Tyr Leu Met Phe
 65 70 75 80
 Phe Glu Leu Phe Tyr Gln Ser Glu Leu Ser Ala Leu Arg Thr Leu Gly
 85 90 95
 Arg Arg Phe Ser Glu Arg Asn Pro Ala Leu Ala Pro Phe Leu Ala Asp
 100 105 110
 Ser Arg Pro Gly Pro Gly Arg Arg Gly Ser Ile Glu Ser Leu Cys Leu
 115 120 125
 Ser Pro Arg Ala Pro Ala Pro Glu Ala Cys
 130 135

<210> 1451
 <211> 326
 <212> DNA
 <213> Homo sapiens

<400> 1451
 aggcctctgg cgagttgatc tacagcttcg gacccgggtgc tatggctact ggcgtcaagt
 60
 acacgaacac agtttgact cctgtgggcg actacgaggt ggtgctgacg gattcttggg
 120
 gtgatggctg gaacccgggt tcttacctga acatgtacga cagctcggac aacttgatcc
 180
 aggagttcac gatggattac gacgcctctt ctcgtaacat taaggagaag cacggcttct
 240
 tcacgggtggc ttccaccacg agcagcggca ctgtctggaa gattatggcg aacaagaagg
 300

tggacaagga gtggaactct gtggac
326

<210> 1452

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1452

```

Met Ala Thr Gly Val Lys Tyr Thr Asn Thr Val Cys Thr Pro Val Gly
 1           5           10           15
Asp Tyr Glu Val Val Leu Thr Asp Ser Trp Gly Asp Gly Trp Asn Pro
           20           25           30
Gly Ser Tyr Leu Asn Met Tyr Asp Ser Ser Asp Asn Leu Ile Gln Glu
           35           40           45
Phe Thr Met Asp Tyr Asp Ala Ser Ser Arg Asn Ile Lys Glu Lys His
           50           55           60
Gly Phe Phe Thr Val Ala Ser Thr Thr Ser Ser Gly Thr Val Trp Lys
65           70           75           80
Ile Met Ala Asn Lys Lys Val Asp Lys Glu Trp Asn Ser Val Asp
           85           90           95

```

<210> 1453

<211> 326

<212> DNA

<213> Homo sapiens

<400> 1453

```

cggcgcgcgc gcccacgtg caccgcgtgc atggtccctc gaggacgcgc atctgcagcc
60
cccgtcccc gcaaacctcc aggccggaga gctccggcca aggccgctgc atcacatgat
120
acaggagggg catgcacacg ctcacgtgca cacagcctca aacacgctca tccgtacata
180
caggagtgtg tgaacgcact gaggtgcaca ggacaaagac acagacacct gtttgcacac
240
cgactgcct atagaaatgt gcaaaccacc cgtgcgcaca ggcccctcca cccatgcagg
300
cgtgtgcaca tcaccacac ggacac
326

```

<210> 1454

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1454

```

Met Val Pro Arg Gly Arg Ala Ser Ala Ala Pro Ala Pro Arg Lys Pro
 1           5           10           15
Pro Gly Arg Arg Ala Pro Ala Lys Ala Ala Ala Ser His Asp Thr Gly
           20           25           30
Gly Ala Cys Thr Arg Ser Arg Ala His Ser Leu Lys His Ala His Pro
           35           40           45
Tyr Ile Gln Glu Cys Val Asn Ala Leu Arg Cys Thr Gly Gln Arg His

```

50 55 60
 Arg His Leu Phe Ala His Arg Leu Ala Tyr Arg Asn Val Gln Thr Thr
 65 70 75 80
 Arg Ala His Arg Pro Leu His Pro Cys Arg Arg Val His Ile Thr His
 85 90 95
 Thr Asp

<210> 1455
 <211> 314
 <212> DNA
 <213> Homo sapiens

<400> 1455
 gatccagtca aaaaagcatg tgggggttgct cacgctgggt ggaaaggtac tttgttgggt
 60
 gttgctatgg ctacagtga tgctatgata gcagaatag gctgccgttt ggaaaaactt
 120
 tgggtggacct tggacccttc agtgggacct ggctgtttta ctcttcagg ggaatcagca
 180
 gaggcatttc ataattctca tcttgcattg gtacaactat ttgattcacc aaatccctgt
 240
 atcgacatcc gtaaagccac aagatacttg actggatttt tgtataactg cttcctgcct
 300
 ccttccaaac tgac
 314

<210> 1456
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1456
 Asp Pro Val Lys Lys Ala Cys Gly Val Ala His Ala Gly Trp Lys Gly
 1 5 10 15
 Thr Leu Leu Gly Val Ala Met Ala Thr Val Asn Ala Met Ile Ala Glu
 20 25 30
 Tyr Gly Cys Arg Leu Glu Lys Leu Trp Trp Thr Leu Asp Pro Ser Val
 35 40 45
 Gly Pro Gly Cys Phe Thr Leu Pro Gly Glu Ser Ala Glu Ala Phe His
 50 55 60
 Asn Leu His Pro Ala Cys Val Gln Leu Phe Asp Ser Pro Asn Pro Cys
 65 70 75 80
 Ile Asp Ile Arg Lys Ala Thr Arg Tyr Leu Thr Gly Phe Leu Tyr Asn
 85 90 95
 Cys Phe Leu Pro Pro Ser Lys Leu
 100

<210> 1457
 <211> 437
 <212> DNA
 <213> Homo sapiens

<400> 1457

nattcaccag aatccccaga atcccccaaa tactacattg cacttttaggg ttcctttcta
 60
 gcacatgcat tgctaaaatc ggcgcccaga accttctctg cccctctccc atgggatgca
 120
 atgtcagcgg agaaacagac caagtctgca ctagcctgtc cctacaccct cccagggaaa
 180
 aggtccccct gcgccaagtc aacagctccc agaggaagcc cactgactgc tctcttcagg
 240
 gtggggggaca caggaagtcc acgcttgac ggaggggacg ggcacaccta ccgtgactgc
 300
 cagagcccat tttgggagtc tgattggaat ttatacagca ggagcactgg gcactcggac
 360
 aactccagcc cacaaccaag tcaactgggt gcctaccac tgcccaagtg cctcaagtca
 420
 acacattcct gcactgn
 437

<210> 1458

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1458

Met	Ser	Ala	Glu	Lys	Gln	Thr	Lys	Ser	Ala	Leu	Ala	Cys	Pro	Tyr	Thr
1				5					10					15	
Leu	Pro	Arg	Lys	Arg	Ser	Pro	Cys	Ala	Lys	Ser	Thr	Ala	Pro	Arg	Gly
			20					25					30		
Ser	Pro	Leu	Thr	Ala	Leu	Phe	Arg	Val	Gly	Asp	Thr	Gly	Ser	Pro	Arg
			35				40					45			
Leu	His	Gly	Gly	Asp	Gly	His	Thr	Tyr	Arg	Asp	Cys	Gln	Ser	Pro	Phe
	50					55				60					
Trp	Glu	Ser	Asp	Trp	Asn	Leu	Tyr	Ser	Arg	Ser	Thr	Gly	His	Ser	Asp
65					70					75				80	
Asn	Ser	Ser	Pro	Gln	Pro	Ser	His	Trp	Ala	Ala	Tyr	Pro	Leu	Pro	Lys
				85					90					95	
Cys	Leu	Lys	Ser	Thr	His	Ser	Cys	Thr							
				100				105							

<210> 1459

<211> 295

<212> DNA

<213> Homo sapiens

<400> 1459

ngagaggtca ccggccacga gattcccgcg gaggtcgcgc cccgccgcgc gggcgacccg
 60
 gccgtactca tcgcttcttc ggagaagatc aagcgggagc tgggctggaa cccgacgcgc
 120
 acggatctgc gccgcatcgt cgaggacgcc tgggccttta cggctggggg ggccgaacgg
 180
 taaacccttg gtaaggcgac gcagttatcc tcgatctcct cccagagcag gcggcagccc
 240
 gccactgcgg tgtcgagcat gccctccac tccccgatcg ccatgagctg gcan
 295

<210> 1460

<211> 60

<212> PRT

<213> Homo sapiens

<400> 1460

```

Xaa Glu Val Thr Gly His Glu Ile Pro Ala Glu Val Ala Pro Arg Arg
 1             5             10             15
Ala Gly Asp Pro Ala Val Leu Ile Ala Ser Ser Glu Lys Ile Lys Arg
      20             25             30
Glu Leu Gly Trp Asn Pro Thr Arg Thr Asp Leu Arg Arg Ile Val Glu
      35             40             45
Asp Ala Trp Ala Phe Thr Ala Gly Gly Ala Glu Arg
      50             55             60

```

<210> 1461

<211> 432

<212> DNA

<213> Homo sapiens

<400> 1461

```

nnaagcttac gtgaaatgaa acgtcaatgg caacaggcga caatcgtgcc agagaaattg
60
gttgaagcac agtcaattgc gggttctaaa tgcgaacacg cctggcgctt acaacgttca
120
gaaaatgact gggtaggctt tgaaaaaaat tggaaagagg ttgttgcatc atcccgtgaa
180
gaagcacaaa ttcgcggtga agcgtttaat ctaacgcctt atgatgcgat gcttgataag
240
tttgaaccag gcacgacaac ggtttcgctc aatactttgt tttcaaaggt aaagacgtgg
300
ttacctacgt taattgaaaa agcgttagaa aagcagcaat cagaatctat cattatgcc
360
tcaggcacct ttccacggc gaatcaaaaa gcccttggat tagaaataat gaaattgtta
420
aaattcgact tt
432

```

<210> 1462

<211> 144

<212> PRT

<213> Homo sapiens

<400> 1462

```

Xaa Ser Leu Arg Glu Met Lys Arg Gln Trp Gln Gln Ala Thr Ile Val
 1             5             10             15
Pro Glu Lys Leu Val Glu Ala Gln Ser Ile Ala Gly Ser Lys Cys Glu
      20             25             30
His Ala Trp Arg Leu Gln Arg Ser Glu Asn Asp Trp Val Gly Phe Glu
      35             40             45
Lys Asn Trp Lys Glu Val Val Ala Leu Ser Arg Glu Glu Ala Gln Ile
      50             55             60
Arg Gly Glu Ala Leu Asn Leu Thr Pro Tyr Asp Ala Met Leu Asp Lys

```

65		70		75		80									
Phe	Glu	Pro	Gly	Thr	Thr	Val	Ser	Leu	Asn	Thr	Leu	Phe	Ser	Lys	
			85					90					95		
Val	Lys	Thr	Trp	Leu	Pro	Thr	Leu	Ile	Glu	Lys	Ala	Leu	Glu	Lys	Gln
			100					105					110		
Gln	Ser	Glu	Ser	Ile	Ile	Met	Pro	Ser	Gly	Thr	Phe	Ser	Thr	Ala	Asn
		115					120					125			
Gln	Lys	Ala	Leu	Gly	Leu	Glu	Ile	Met	Lys	Leu	Leu	Lys	Phe	Asp	Phe
		130					135					140			

<210> 1463

<211> 421

<212> DNA

<213> Homo sapiens

<400> 1463

```

nacgcgttcc agagcaagct ggacctgacc gccttcgaat tcttctccga caaggccctg
60
gccaaagtca tgggccgtgg cgacgtaccg gcaccgttcg aaaccgaatg cccgttctac
120
gcgctgctgg aattcgaagc caccaccgaa gaagtcgcca accacgccct ggaaaccttc
180
gagcactgcy ttgagcaggg ctgggtgctg gacggcgtga tgagccagag cgaaacccaa
240
ctgcacaacc tgtggaaact gcgcgagtag atctcggaga ctatttccca ctggacgccc
300
tacaagaacg acatctccgt gaccgtttcc aaagtccccg cgttcttgaa ggaaattgac
360
gcgatcgctg tgagcattac ccggacttcg aaattgttgg tcggccacat cggcgacgca
420
a
421

```

<210> 1464

<211> 140

<212> PRT

<213> Homo sapiens

<400> 1464

Xaa	Ala	Phe	Gln	Ser	Lys	Leu	Asp	Leu	Thr	Ala	Phe	Glu	Phe	Phe	Ser
1				5					10					15	
Asp	Lys	Ala	Leu	Ala	Lys	Val	Met	Gly	Arg	Gly	Asp	Val	Pro	Ala	Pro
			20					25					30		
Phe	Glu	Thr	Glu	Cys	Pro	Phe	Tyr	Ala	Leu	Leu	Glu	Phe	Glu	Ala	Thr
		35					40					45			
Thr	Glu	Glu	Val	Ala	Asn	His	Ala	Leu	Glu	Thr	Phe	Glu	His	Cys	Val
		50				55					60				
Glu	Gln	Gly	Trp	Val	Leu	Asp	Gly	Val	Met	Ser	Gln	Ser	Glu	Thr	Gln
65					70				75					80	
Leu	His	Asn	Leu	Trp	Lys	Leu	Arg	Glu	Tyr	Ile	Ser	Glu	Thr	Ile	Ser
			85					90					95		
His	Trp	Thr	Pro	Tyr	Lys	Asn	Asp	Ile	Ser	Val	Thr	Val	Ser	Lys	Val
			100					105					110		
Pro	Ala	Phe	Leu	Lys	Glu	Ile	Asp	Ala	Ile	Val	Val	Ser	Ile	Thr	Arg

115 120 125
 Thr Ser Lys Leu Leu Val Gly His Ile Gly Asp Ala
 130 135 140
 <210> 1465
 <211> 424
 <212> DNA
 <213> Homo sapiens
 <400> 1465
 gtgcacggtc tttgagctgc aattcccagg aatcaggggc cataggcggg agatggcatg
 60
 cagcctctcg ggcgggaaag tggctctacag tgcttgcttg cccgggcagg cagctcgtag
 120
 gcttatatgc ttagtggtta tggccctac cactgttttt gaccgcgcta ccattcgcca
 180
 caacctcacc gaattcaaac tccgggtggat ttcccacgcc gagcagtgga aggcggaaaa
 240
 ccgtcctgca acagagtcta aagccgctga gacggactgc tcagtacatg gggatctctg
 300
 gaccttggcc acggaagttt tcgggtcaagc acccgaattc gacttcccat atatgaaact
 360
 cactcggcag gaatgtaggt tcctttttct gccgagaaac gacatcagct tgagctgctt
 420
 cacg
 424

<210> 1466
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 1466
 Met Ala Cys Ser Leu Ser Gly Gly Lys Val Val Tyr Ser Ala Cys Leu
 1 5 10 15
 Pro Gly Gln Ala Ala Arg Arg Leu Ile Cys Leu Val Val Met Ala Pro
 20 25 30
 Thr Thr Val Phe Asp Arg Ala Thr Ile Arg His Asn Leu Thr Glu Phe
 35 40 45
 Lys Leu Arg Trp Ile Ser His Ala Glu Gln Trp Lys Ala Glu Asn Arg
 50 55 60
 Pro Ala Thr Glu Ser Lys Ala Ala Glu Thr Asp Cys Ser Val His Gly
 65 70 75 80
 Asp Leu Trp Thr Leu Ala Thr Glu Val Phe Gly Gln Ala Pro Glu Phe
 85 90 95
 Asp Phe Pro Tyr Met Lys Leu Thr Arg Gln Glu Cys Arg Phe Leu Phe
 100 105 110
 Leu Pro Arg Asn Asp Ile Ser Leu Ser Cys Phe Thr
 115 120

<210> 1467
 <211> 441
 <212> DNA
 <213> Homo sapiens

<400> 1467

nacgcgtgac ggcgaaatgag cggcggaggc atgacaacga gcgcaccgtt ccgcagcttg
 60
 gtgccgtgca tcatggctca agtgccgcgc aactttcggc tgctcgagga gctggagaaa
 120
 ggcgaaaagg ggctaggaaa tggctcgtgc tcttacggcc ttgcgaacag tgatgacatt
 180
 cgtacgtatg cgctgtgct gatggctcatg acaacgtgga atgccacgat cctaggccccg
 240
 gccaaactcgg tgcattgagaa ccgcatatac tgcttcgcgc tcgtgtgtgg cgactcgtac
 300
 cctcttgtgc cgctgagat ttggttccag acgcgcacatca acttgccgtg cgtcgatgcc
 360
 cacacggggc gcgtcatgcc cgatcagttc tcgccccctc tgcattggcg tgatgagtac
 420
 actatggaaa gctgctgcat g
 441

<210> 1468

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1468

Met Ala Gln Val Pro Arg Asn Phe Arg Leu Leu Glu Glu Leu Glu Lys
 1 5 10 15
 Gly Glu Lys Gly Leu Gly Asn Gly Ser Cys Ser Tyr Gly Leu Ala Asn
 20 25 30
 Ser Asp Asp Ile Arg Thr Tyr Ala Pro Val Leu Met Val Met Thr Thr
 35 40 45
 Trp Asn Ala Thr Ile Leu Gly Pro Ala Asn Ser Val His Glu Asn Arg
 50 55 60
 Ile Tyr Cys Leu Arg Leu Val Cys Gly Asp Ser Tyr Pro Leu Val Pro
 65 70 75 80
 Pro Glu Ile Trp Phe Gln Thr Arg Ile Asn Leu Pro Cys Val Asp Ala
 85 90 95
 His Thr Gly Arg Val Met Pro Asp Gln Phe Ser Pro Leu Leu His Trp
 100 105 110
 Arg Asp Glu Tyr Thr Met Glu Ser Cys Cys Met
 115 120

<210> 1469

<211> 468

<212> DNA

<213> Homo sapiens

<400> 1469

nngctcgatc tagtctatgg gctaaatgat cgaccgaacc cttttattgc ttttttagcg
 60
 gcgcttcaac atcttttagc gatttttagtg ccaattgtca ccnctggatt attgatttgc
 120
 ttggcattag gcgtgtctcg cgaagacacc aatatgattc tttctatgtc attaattatt
 180

tcagggatcg cgactttctt gcaatgtaaa aaagttggtc catttggcgc tggattactt
 240
 attgttcaag gaactagctt taatttcatt ggtcctatca ttggtatagg tagctcaatg
 300
 gtggctgctg gcacacctgt cgaacaagtt atggctgcga tttttggtgt cgtaatcgca
 360
 ggttcattta tcgaaatggg cgtatctcaa attttacctt gggtaaaaaa gctgattact
 420
 cctctcgtta caggaatcgt cgttctgttg attggtctac cattaatg
 468

<210> 1470

<211> 156

<212> PRT

<213> Homo sapiens

<400> 1470

Xaa	Leu	Asp	Leu	Val	Tyr	Gly	Leu	Asn	Asp	Arg	Pro	Asn	Pro	Phe	Ile
1			5					10					15		
Ala	Phe	Leu	Ala	Ala	Leu	Gln	His	Leu	Leu	Ala	Ile	Leu	Val	Pro	Ile
	20					25						30			
Val	Thr	Xaa	Gly	Leu	Leu	Ile	Cys	Leu	Ala	Leu	Gly	Val	Ser	Arg	Glu
	35					40					45				
Asp	Thr	Asn	Met	Ile	Leu	Ser	Met	Ser	Leu	Ile	Ile	Ser	Gly	Ile	Ala
	50				55					60					
Thr	Phe	Leu	Gln	Cys	Lys	Lys	Val	Gly	Pro	Phe	Gly	Ala	Gly	Leu	Leu
65				70				75				80			
Ile	Val	Gln	Gly	Thr	Ser	Phe	Asn	Phe	Ile	Gly	Pro	Ile	Ile	Gly	Ile
		85					90					95			
Gly	Ser	Ser	Met	Val	Ala	Ala	Gly	Thr	Pro	Val	Glu	Gln	Val	Met	Ala
	100						105				110				
Ala	Ile	Phe	Gly	Val	Val	Ile	Ala	Gly	Ser	Phe	Ile	Glu	Met	Gly	Val
	115					120					125				
Ser	Gln	Ile	Leu	Pro	Trp	Val	Lys	Lys	Leu	Ile	Thr	Pro	Leu	Val	Thr
	130				135					140					
Gly	Ile	Val	Val	Leu	Leu	Ile	Gly	Leu	Pro	Leu	Met				
145				150						155					

<210> 1471

<211> 341

<212> DNA

<213> Homo sapiens

<400> 1471

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 gttatcgatc agccgctgac gattttgcac accaatctgg cggtgtatat cggcattgtg
 120
 tacgcttatc tgccgtttat ggtactgcc atttatacgg cgctgacgcg cattgattac
 180
 tcgctgggtg aggcctcact ggatctcggg gcccgctccg tgaaaacgtt tttcaatgtg
 240
 attgtcccgc tcaccaaagg cggcattatc gcggggtcga tgctggtgtt tatcccggcg
 300

gtcgggtgagt ttgttataccc ggaactgctc ggcgggcgcc g
341

<210> 1472

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1472

Ala Trp Met Gly Ile Leu Lys Asn Asn Gly Val Leu Asn Asn Phe Leu
1 5 10 15
Leu Trp Leu Gly Val Ile Asp Gln Pro Leu Thr Ile Leu His Thr Asn
20 25 30
Leu Ala Val Tyr Ile Gly Ile Val Tyr Ala Tyr Leu Pro Phe Met Val
35 40 45
Leu Pro Ile Tyr Thr Ala Leu Thr Arg Ile Asp Tyr Ser Leu Val Glu
50 55 60
Ala Ser Leu Asp Leu Gly Ala Arg Pro Leu Lys Thr Phe Phe Asn Val
65 70 75 80
Ile Val Pro Leu Thr Lys Gly Gly Ile Ile Ala Gly Ser Met Leu Val
85 90 95
Phe Ile Pro Ala Val Gly Glu Phe Val Ile Pro Glu Leu Leu Gly Gly
100 105 110
Gly

<210> 1473

<211> 352

<212> DNA

<213> Homo sapiens

<400> 1473

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gaaactgacg gaaatgttca aactccagtt tgttggttaag cagatcacta aacttaaaat
120
gcttgtattc tgcaggaaca ttatcccaat attctgttcg tttagagacg ttagagagtg
180
ataaaatgcc agttccaatt tcacaagtgg tgtcctcagc tttcttgga aatgtctctt
240
tatgcaaagc ctgtagcttt ctgaagtatg tggagtctaa ctgtcgagtt tcttccacca
300
gtccacctt tttataagca atttggtccg attttaccat ctttgtccat gg
352

<210> 1474

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1474

Met Val Lys Ser Asp Gln Ile Ala Tyr Lys Lys Val Glu Leu Val Glu
1 5 10 15
Glu Thr Arg Gln Leu Asp Ser Thr Tyr Phe Arg Lys Leu Gln Ala Leu

	20		25		30										
His	Lys	Glu	Thr	Phe	Ser	Lys	Lys	Ala	Glu	Asp	Thr	Thr	Cys	Glu	Ile
	35		40		45										
Gly	Thr	Gly	Ile	Leu	Ser	Leu	Ser	Asn	Val	Ser	Lys	Arg	Thr	Glu	Tyr
	50		55		60										
Trp	Asp	Asn	Val	Pro	Ala	Glu	Tyr	Lys	His	Phe	Lys	Phe	Ser	Asp	Leu
65			70		75									80	
Leu	Asn	Asn	Lys	Leu	Glu	Phe	Glu	His	Phe	Arg	Gln	Phe	Leu	Glu	Thr
			85		90									95	
His	Ser	Ser	Ser	Met	Asp	Leu	Met	Cys	Trp	Thr	Asp	Ile	Glu	Gln	Phe
			100		105									110	
Arg															

<210> 1475

<211> 389

<212> DNA

<213> Homo sapiens

<400> 1475

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accggtgccg gagccgatct ccacgatggt cttggcgccg gtgcggccga accactcatc
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gacatcgata agctcatcgc ttaagacgcg gccagctcg ggccagcatt gctcaaaaag
120
ctggtgctgg ttgtccgtga gcgtgccgcg ggggaaaggg acctttgccc aggcgcgggt
180
agtccaggtc attatcaaag accgcattga agtccgtttg cggcggggcga cccggcgggca
240
tttctccggc aggggggtgtt ttgagaatta tccgtgctat acatcgcgcc ctatttttcc
300
ctgtccaggc atggcaagca atatgccgcg cggggtattt tccccgccgt atggggaggg
360
ggataaccgg agcttgacgg ggtgggtgtc
389

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<210> 1476

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1476

Met	Val	Leu	Ala	Pro	Val	Arg	Pro	Asn	His	Ser	Ser	Thr	Ser	Ile	Ser
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Ser	Ser	Leu	Lys	Thr	Arg	Pro	Ser	Ser	Gly	Gln	His	Cys	Ser	Lys	Ser
		20					25					30			
Trp	Cys	Trp	Leu	Ser	Val	Ser	Val	Pro	Arg	Gly	Lys	Gly	Thr	Phe	Ala
	35				40						45				
Gln	Ala	Arg	Val	Val	Gln	Val	Ile	Ile	Lys	Asp	Arg	Ile	Glu	Val	Arg
	50				55					60					
Leu	Arg	Arg	Ala	Thr	Arg	Arg	His	Phe	Ser	Gly	Arg	Gly	Cys	Phe	Glu
65			70						75					80	
Asn	Tyr	Pro	Cys	Tyr	Thr	Ser	Arg	Pro	Ile	Phe	Pro	Cys	Pro	Gly	Met
			85				90					95			
Ala	Ser	Asn	Met	Pro	Arg	Arg	Val	Phe	Ser	Pro	Pro	Tyr	Gly	Glu	Gly

100 105 110
 Asp Asn Arg Ser Leu Thr Gly Trp Cys
 115 120
 <210> 1477
 <211> 500
 <212> DNA
 <213> Homo sapiens
 <400> 1477
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 ttcctccctt atttgctggg ccaaacggac ggccaaccta aagatgcccc atgggcatcg
 120
 gcgctgtgtg gtattgatgc cgaaatcatc cgggcactgg cccgccaaat ggcggccaac
 180
 cgtacgcaaa tcattgcggg ctggtgcgtg caacgtatgc aacacggcga acaatgggcg
 240
 tggatgacgg tagtctggc ggcatgctt ggccaaatcg gcttaccggg cggggggttc
 300
 ggttttggtt ggccctccaa cggcgcaggt acccccgagc cgcaaggggt gatcctgagc
 360
 ggtttctccg gttccccgc tacgccggca cgccatgcca agggggattt caaaggttac
 420
 agcagtacca ttccgatcgc gcgctttatc gatgccatgc tggagccggg caaggagatc
 480
 gattggaatg gcaaacgcgt
 500

<210> 1478
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 1478
 Tyr Ser Glu Asn Leu His Asp Thr His Phe Leu Lys Thr Tyr Cys Val
 1 5 10 15
 Gly Phe Glu Gln Phe Leu Pro Tyr Leu Leu Gly Gln Thr Asp Gly Gln
 20 25 30
 Pro Lys Asp Ala Gln Trp Ala Ser Ala Leu Cys Gly Ile Asp Ala Glu
 35 40 45
 Ile Ile Arg Ala Leu Ala Arg Gln Met Ala Ala Asn Arg Thr Gln Ile
 50 55 60
 Ile Ala Gly Trp Cys Val Gln Arg Met Gln His Gly Glu Gln Trp Ala
 65 70 75 80
 Trp Met Thr Val Val Leu Ala Ala Met Leu Gly Gln Ile Gly Leu Pro
 85 90 95
 Gly Gly Gly Phe Gly Phe Gly Trp Pro Ser Asn Gly Ala Gly Thr Pro
 100 105 110
 Glu Pro Gln Gly Val Ile Leu Ser Gly Phe Ser Gly Ser Pro Ala Thr
 115 120 125
 Pro Ala Arg His Ala Lys Gly Asp Phe Lys Gly Tyr Ser Ser Thr Ile
 130 135 140
 Pro Ile Ala Arg Phe Ile Asp Ala Met Leu Glu Pro Gly Lys Glu Ile

145 150 155 160
 Asp Trp Asn Gly Lys Arg
 165

<210> 1479
 <211> 421
 <212> DNA
 <213> Homo sapiens

<400> 1479
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 ttaagtatgt tctttacatt gaaacagaaa ggaaagaaga taggaaaaat ggtgccagca
 120
 cgctgggctt tttttgtttg ctgttttggg tgggggtgtgc tagtgcagtg tccggtgtac
 180
 gcttttgtcc tcaaacaggc ttgttccccg gtcagagttt cattattggt gctggtaaac
 240
 aaatgccaag ttgacaaaa aacagtgaag taaagcaaaa gattttgaaa aatgcttcat
 300
 catgtcagaa ggaaagaacc cttttcacgg gtgcctgccc acatttcctt gccagcctg
 360
 agaccctatt gactttgaat tatcttttgc tgttttattt ctatgaaaat tatatacgcg
 420
 t
 421

<210> 1480
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 1480
 Met Lys Ala Arg Cys Ala Ser Leu Ile Glu Ala Gly Thr Leu Lys Tyr
 1 5 10 15
 Val Leu Tyr Ile Glu Thr Glu Arg Lys Glu Asp Arg Lys Asn Gly Ala
 20 25 30
 Ser Thr Leu Gly Phe Phe Cys Leu Leu Phe Trp Val Gly Cys Ala Ser
 35 40 45
 Ala Val Ser Gly Val Arg Phe Cys Pro Gln Thr Gly Leu Phe Pro Gly
 50 55 60
 Gln Ser Phe Ile Ile Val Ala Gly Lys Gln Met Pro Ser Leu Thr Lys
 65 70 75 80
 Asn Ser Glu Ile Lys Gln Lys Ile Leu Lys Asn Ala Ser Ser Cys Gln
 85 90 95
 Lys Glu Arg Thr Leu Phe Thr Gly Ala Cys Pro His Phe Leu Ala Gln
 100 105 110
 Pro Glu Thr Leu Leu Thr Leu Asn Tyr Leu Leu Leu Phe Tyr Phe Tyr
 115 120 125
 Glu Asn Tyr Ile Arg
 130

<210> 1481
 <211> 545

<212> DNA

<213> Homo sapiens

<400> 1481

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 tccggatgca gatgggagag ttggccacgc gcgattattt gcgctcggag ctacgcgacg
 120
 agttgcgctc cctgctcgag gagatcgagg cctcaccggc ctcccactaa ctgaccgggt
 180
 tcgcgacgag cgagttgtcg catcgggcca acggtgtgta gacaagtcag catgagcacc
 240
 gagaacccag tggtaaggc cattgccgat gcgttgctgc acgtcaatga ccccagatc
 300
 aaacgcccc ttaccgatct caacatgatt gatgagatta ccgtcgacga gcaaggacgc
 360
 gctttcgtcc gcatectgct gaccgtcgcc ggggtgtcccc tcaagaccga gctgcgtgag
 420
 caggccaccg aggctgtgcg cagcgttgac ggggtgacca gtgtttccgt cgaactcggc
 480
 accatgaccg acgaacagcg cgatgctctc aaagtccagc tgcgcggtga cgtccccgaa
 540
 cgcgt
 545

<210> 1482

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1482

Met	Ser	Thr	Glu	Asn	Pro	Val	Val	Lys	Ala	Ile	Ala	Asp	Ala	Leu	Ser
1				5				10						15	
His	Val	Asn	Asp	Pro	Glu	Ile	Lys	Arg	Pro	Ile	Thr	Asp	Leu	Asn	Met
		20					25					30			
Ile	Asp	Glu	Ile	Thr	Val	Asp	Glu	Gln	Gly	Arg	Ala	Phe	Val	Arg	Ile
	35					40					45				
Leu	Leu	Thr	Val	Ala	Gly	Cys	Pro	Leu	Lys	Thr	Glu	Leu	Arg	Glu	Gln
	50				55					60					
Ala	Thr	Glu	Ala	Val	Arg	Ser	Val	Asp	Gly	Val	Thr	Ser	Val	Ser	Val
65				70				75						80	
Glu	Leu	Gly	Thr	Met	Thr	Asp	Glu	Gln	Arg	Asp	Ala	Leu	Lys	Val	Gln
			85					90						95	
Leu	Arg	Gly	Asp	Val	Pro	Glu	Arg								
				100											

<210> 1483

<211> 625

<212> DNA

<213> Homo sapiens

<400> 1483

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ttggaggtaa agctggtgct gctgtggaaa cacaacatgc gcattgagta tgtggctatg
 120
 gcatacctggc ccctggagcc tgagggccct cgagtaacac ggggtggaagt gacgatggaa
 180
 ggaggctacg acattttgca tgatgtgtcc tgtgcactaa ggcagcccat tcgttcattg
 240
 tatcgtaacc atgttatccg gcgtttctgg aacacgctgc agagcatcaa ccagacagac
 300
 cagatgcttg cccaccttca gtccttctcc tcagtgcctg agcatttcac gcttctgac
 360
 agcaccaaga gcggagtgcc actcttctac atccctccag gctccaccac cccggtgctc
 420
 tccctccagc ccagtgggtc tgactcatcc catgcccagt ttgctgcta ctggaagccc
 480
 agtgtgtgcc atggatgcaa attcctggca gcgatggctg cacatgcac gctggtgct
 540
 aatcctggag catgacacac caatcccaa gcacttgac accccgggca gcaatgggcg
 600
 ctactacgga gagaagacaa cgcgt
 625

<210> 1484

<211> 184

<212> PRT

<213> Homo sapiens

<400> 1484

Val	Arg	Leu	Arg	Glu	Gly	Tyr	Ser	Val	Arg	Glu	Val	Thr	Leu	Ala	Lys
1			5					10						15	
Gly	Gly	Ser	Gln	Leu	Glu	Val	Lys	Leu	Val	Leu	Leu	Trp	Lys	His	Asn
			20					25					30		
Met	Arg	Ile	Glu	Tyr	Val	Ala	Met	Ala	Ser	Trp	Pro	Leu	Glu	Pro	Glu
		35					40					45			
Gly	Pro	Arg	Val	Thr	Arg	Val	Glu	Val	Thr	Met	Glu	Gly	Gly	Tyr	Asp
	50					55				60					
Ile	Leu	His	Asp	Val	Ser	Cys	Ala	Leu	Arg	Gln	Pro	Ile	Arg	Ser	Leu
65				70					75					80	
Tyr	Arg	Thr	His	Val	Ile	Arg	Arg	Phe	Trp	Asn	Thr	Leu	Gln	Ser	Ile
			85					90					95		
Asn	Gln	Thr	Asp	Gln	Met	Leu	Ala	His	Leu	Gln	Ser	Phe	Ser	Ser	Val
			100					105				110			
Pro	Glu	His	Phe	Thr	Leu	Pro	Asp	Ser	Thr	Lys	Ser	Gly	Val	Pro	Leu
		115					120					125			
Phe	Tyr	Ile	Pro	Pro	Gly	Ser	Thr	Thr	Pro	Val	Leu	Ser	Leu	Gln	Pro
	130					135				140					
Ser	Gly	Ser	Asp	Ser	Ser	His	Ala	Gln	Phe	Ala	Ala	Tyr	Trp	Lys	Pro
145					150				155					160	
Ser	Ala	Val	His	Gly	Cys	Lys	Phe	Leu	Ala	Ala	Met	Ala	Ala	His	Ala
			165					170					175		
Ser	Pro	Gly	Ala	Asn	Pro	Gly	Ala								
			180												

<210> 1485

<211> 2058

<212> DNA

<213> Homo sapiens

<400> 1485

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120
gttggcgata ttacttctga atcacctctt aaaatgtggc ataccagaac tttattgaat
180
gcctacagca atctgaaaga tgatgccaag tccaattggg tatgggtggga ccttcctatg
240
ccagcccaga gaaaatctgc tttcgccgat ttgattgaag aaaatcctag cagcggttaag
300
tggcataccc ggaaggaaac acagcagctc ttggatatga tgactgatgt taacttagct
360
aagggttgagg ctgcaaaaaa gctatcgatc gagtctaagg aaaatgttgt agggacaatt
420
tataaaaagaa ctgcgaccga tagctttgga gttaaagcgc agcgtgctga agtgcggttt
480
gatgatgttg ccggttgtct tcgcaacctt ggaggggggt caagtcggca agtcataatg
540
gtcgttgata acgggactgt aaaaacgagg ttgatctcaa gtagagaaac tgcaaggctt
600
atgggggttac ccgacgaata catattgcc aaaaattata atgaggcgta tcacttaacg
660
ggtgatggtg ttgtagtgcc ggttgatatc cacatagcca ctcatatttt tgacccagt
720
atggagcgtg tgtttgagga tgcggcggga ctgcttaagc aaatcgcata gcatcgtttt
780
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840
aatcctatgc agaagccttg aaagttgagg ccataagct aggagagcat ggattaactg
900
aagctgaatt ttatgatagc ggcctctttc ggggggctat cgagcgaatt cgaggacagt
960
tctccgcgac catgcgggag aaaagaaatt tcgttaagca tgttttaaat tacatgcagg
1020
ataacgacta cattgctgat tgggagtcgg ctggtgaatc gaatcgccat gattatatgg
1080
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1140
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1260
ctgaaatcat ttcacgggag caaaggattg atggaatggt catttgggac tgggcttg
1320
gaacagtcgg aaggccatgc ccaaaatag caactgaacc tgagcgggct gtaacattt
1380
ggcgttcaa attgccgcca ccatgtttgt atcttttacc ttcgacgatt ccaagcccaa
1440
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1500

acgattgttt tgggtgccgg tctgaagaag ttaatttcgt taactttgat gttggttattc
 1560
 atggtaaaga taccgtccgt aaaacgacta tcattcgaaa cggcatgggtg gagcgtgaat
 1620
 cggaaatgac ggcaataagg cggctctaat ttgtgcatgc ctatgctgca tgaatccgca
 1680
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 1740
 catgcacctg catgaaaacc gctacataaa gcggggcaggc gtggcgggga tacgagcgcg
 1800
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 1860
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 1920
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 1980
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 2040
 gcagtcgctt ctgcaggc
 2058

<210> 1486

<211> 256

<212> PRT

<213> Homo sapiens

<400> 1486

Xaa	Cys	Ser	Ala	Phe	Asn	Asp	Ile	Gly	Tyr	His	Tyr	Gly	Ala	Met	Val
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Val	Asp	Ala	Ala	Leu	Phe	Leu	Pro	Gln	Ser	Arg	Pro	Arg	Leu	Phe	Ile
		20						25					30		
Ile	Gly	Val	Arg	Asn	Asp	Ile	Phe	Val	Gly	Asp	Ile	Thr	Ser	Glu	Ser
		35					40					45			
Pro	Ser	Lys	Met	Trp	His	Thr	Arg	Thr	Leu	Leu	Asn	Ala	Tyr	Ser	Asn
		50				55					60				
Leu	Lys	Asp	Asp	Ala	Lys	Ser	Asn	Trp	Val	Trp	Trp	Asp	Leu	Pro	Met
65				70					75				80		
Pro	Ala	Gln	Arg	Lys	Ser	Ala	Phe	Ala	Asp	Leu	Ile	Glu	Glu	Asn	Pro
			85					90					95		
Ser	Ser	Val	Lys	Trp	His	Thr	Arg	Lys	Glu	Thr	Gln	Gln	Leu	Leu	Asp
		100						105					110		
Met	Met	Thr	Asp	Val	Asn	Leu	Ala	Lys	Val	Glu	Ala	Ala	Lys	Lys	Leu
		115					120					125			
Ser	Ile	Glu	Ser	Lys	Glu	Asn	Val	Val	Gly	Thr	Ile	Tyr	Lys	Arg	Thr
	130					135					140				
Arg	Thr	Asp	Ser	Phe	Gly	Val	Lys	Ala	Gln	Arg	Ala	Glu	Val	Arg	Phe
145				150					155					160	
Asp	Asp	Val	Ala	Gly	Cys	Leu	Arg	Thr	Pro	Gly	Gly	Gly	Ser	Ser	Arg
			165					170					175		
Gln	Val	Ile	Met	Val	Val	Asp	Asn	Gly	Thr	Val	Lys	Thr	Arg	Leu	Ile
		180					185						190		
Ser	Ser	Arg	Glu	Thr	Ala	Arg	Leu	Met	Gly	Leu	Pro	Asp	Glu	Tyr	Ile
		195				200						205			
Leu	Pro	Lys	Asn	Tyr	Asn	Glu	Ala	Tyr	His	Leu	Thr	Gly	Asp	Gly	Val

210	215	220
Val Val Pro Val Val Ser His Ile Ala Thr His Ile Phe Asp Pro Val		
225	230	235
Met Glu Arg Val Phe Glu Asp Ala Ala Gly Leu Leu Lys Gln Ile Ala		
245	250	255

<210> 1487
 <211> 823
 <212> DNA
 <213> Homo sapiens

<400> 1487
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 ccgagcaggt gacatttcag ctaaggctgg gaaggatgag gagaagtcag gaactccagg
 120
 catcagggaa tgctggggaa aaaaagcact ccaggcccag ggatcagcaa agcacaggat
 180
 gcctggggga acacacagcc tcagagcatt tgaggaacag aaaaggcaac gtgactaagc
 240
 ttcttggggc ggtgaggtca ggcagggagg tgggtgcgag gtcattggggc cgcaggcaaa
 300
 cggccctccc tcccagtgcc ccacatgcag gccctggagc accaggagcg gggaggctcc
 360
 gtggtgtgtc ttcttgcaag tggcctgcct ttgggagcat cagccctttc ttctggggag
 420
 tgggagagggc cggcagttag ggaagaatgg ccctcggtcg tgcgtagaga atgtagggga
 480
 cacagggcct ctacaggacc cagatcctga tcttgtcaga tctgcacgcc cgtgggaggg
 540
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 660
 cccctacat ttctggggca cccactgtag gccaggccct gtgccggatc tgatgatata
 720
 gtgatgacta agtcacagtc cctgcctctg aggcccccat gatgtgccgg gacagccaag
 780
 caacccaata tgttaaaatc cagtgtcagg acccnaggag aag
 823

<210> 1488
 <211> 149
 <212> PRT
 <213> Homo sapiens

<400> 1488
 Met Leu Gly Arg Ser Cys Glu Gly Lys Phe Arg Lys Asp Leu Ser Glu
 1 5 10 15
 Gln Val Thr Phe Gln Leu Arg Leu Gly Arg Met Arg Arg Ser Gln Glu
 20 25 30
 Leu Gln Ala Ser Gly Asn Ala Gly Glu Lys Lys His Ser Arg Pro Arg
 35 40 45
 Asp Gln Gln Ser Thr Gly Cys Leu Gly Glu His Thr Ala Ser Glu His

```

      50              55              60
Leu Arg Asn Arg Lys Gly Asn Val Thr Lys Leu Pro Gly Ala Val Arg
65              70              75              80
Ser Gly Arg Glu Val Gly Ala Arg Ser Trp Gly Arg Arg Gln Thr Ala
      85              90              95
Leu Pro Pro Ser Ala Pro His Ala Gly Pro Gly Ala Pro Gly Ala Gly
      100              105              110
Arg Leu Arg Gly Val Ser Ser Cys Lys Trp Pro Ala Phe Gly Ser Ile
      115              120              125
Ser Pro Phe Ser Trp Gly Leu Gly Glu Ala Gly Ser Glu Gly Arg Met
      130              135              140
Ala Leu Gly Arg Ala
145

```

<210> 1489

<211> 342

<212> DNA

<213> Homo sapiens

<400> 1489

```

nnccagttca ccgtcaagct ggccgcggcc ggccaacaca atgtgcgcaa tgcgctggcc
60
gcgattgcct gcgccgtggg tgccggcatc aaccaggacg ccatcgtagc cggcctcgaa
120
gccttcgccc cggtcggcgg acgtttgcag cgcaagcagg ccgccagcgg cgcgcccgtc
180
attgacgaca cccacaaccc caatcccaat tcaatgcgcc cggcgatcga cgtgctggcc
240
cgcgtagccg cgccgcgcat cctggtggtg ggcgacatgg gcgaagtcgg cgcacagggg
300
aaagaatttc acgaagaaat cggggcttac gcacacacgc gt
342

```

<210> 1490

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1490

```

Xaa Gln Phe Thr Val Lys Leu Ala Ala Ala Gly Glu His Asn Val Arg
1              5              10              15
Asn Ala Leu Ala Ala Ile Ala Cys Ala Val Gly Ala Gly Ile Asn Gln
      20              25              30
Asp Ala Ile Val Arg Gly Leu Glu Ala Phe Ala Pro Val Gly Gly Arg
      35              40              45
Leu Gln Arg Lys Gln Ala Ala Ser Gly Ala Pro Val Ile Asp Asp Thr
      50              55              60
His Asn Pro Asn Pro Asn Ser Met Arg Pro Ala Ile Asp Val Leu Ala
65              70              75              80
Arg Val Pro Ala Pro Arg Ile Leu Val Val Gly Asp Met Gly Glu Val
      85              90              95
Gly Ala Gln Gly Lys Glu Phe His Glu Glu Ile Gly Ala Tyr Ala His
      100              105              110
Thr Arg

```


<210> 1491
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 1491
 ncctcgttgt tctcatagag ggctacggca tcgcgtttga actgttcgga gtacctggac
 60
 atgggggtag attacctttc ttcccagctc gactgggctg gatatcaggt gtccaccaca
 120
 tggggggtcag gtcccactcc caaaggagta gccatcaccc acgagtcggc ggtcaatacg
 180
 attgtcgtg tcaacgaacg cctcgggggtg actccgaccg accggatatt ggggatttca
 240
 gagctaaact tcgatctatc ggtatacgac atcttcggga tgttcgcgcg ggggtgctacc
 300
 ttggtgttgc catctccagc agacaaacgt gat
 333

<210> 1492
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 1492
 Met Gly Val Asp Tyr Leu Ser Ser Gln Leu Asp Trp Ala Gly Tyr Gln
 1 5 10 15
 Val Ser Thr Thr Trp Gly Ser Gly Pro Thr Pro Lys Gly Val Ala Ile
 20 25 30
 Thr His Glu Ser Ala Val Asn Thr Ile Val Asp Val Asn Glu Arg Leu
 35 40 45
 Gly Val Thr Pro Thr Asp Arg Ile Leu Gly Ile Ser Glu Leu Asn Phe
 50 55 60
 Asp Leu Ser Val Tyr Asp Ile Phe Gly Met Phe Ala Arg Gly Ala Thr
 65 70 75 80
 Leu Val Leu Pro Ser Pro Ala Asp Lys Arg Asp
 85 90

<210> 1493
 <211> 1316
 <212> DNA
 <213> Homo sapiens

<400> 1493
 nggtaccagg gcaaagaagg ctggggcccc gcctcctacc taaagaagaa cagtggggag
 60
 cccttgcccc cgaagccagg ccctgggtca ccctcccacc cgggtgccct tgacttgat
 120
 ggtgtttccc ggcagcagaa cgcggtgggc agggagaagg agctgctcag cagccagagg
 180
 gacgggcggt ttgaaggccg cccggtgccc gacggtgacg ccaagcagag atcaccaaag
 240

atgaggcaga gacccccctcc tcgccgggac atgaccattc ctcgaggcct caacctgccg
 300
 aagccgcccc tcccgcccca agtggaggaa gagtattaca ccatcgccga attccagaca
 360
 accatcccag acggcatcag cttccaggca ggcctgaagg tcgaggtgat cgagaaaaac
 420
 ttgagtggct ggtggtacat tcagattgaa gataaggaag ggtgggcccc ggccaccttc
 480
 attgacaagt acaagaagac gagcaacgcg tcgagaccca actttctggc tccctgccc
 540
 cagaggtga cccagctccg gctgggggaa gcagcagcgc tggagaacaa cacgggcagc
 600
 gaagccacgg gccctcccg gccctgcct gacgcaccgc atggtgtcat ggactcgggg
 660
 ttgccatggt ctaaagactg gaagggcagt aaggatgtcc tgaggaaggc atcttcagac
 720
 atgtctgctg cagcaggcta cgaggagatc tcagaccccg acatggagga gaagcccagc
 780
 ctccctccgc ggaaagaatc catcatcaag tcggaggggg agctgctgga gcgggagcgg
 840
 gagcggcaga ggacggagca gctccggggc cccactccca agcctccggg cgtgattttg
 900
 ccgatgatgc cagccaaaca catccctcca gcccgggaca gcaggaggcc agagcccaaa
 960
 cctgacaaaa gcagactggt ccagctgaaa aatgacatgg ggctggagtg tggccacaag
 1020
 gtcttggcca aggaagtga gaagcccaac ctccggccca tctccaaatc caaaactgac
 1080
 ctgccagagg agaagccaga tgccactccc cagaatccct tcttgaagtc cagacctcag
 1140
 gttaggccaa aaccagctcc ttccccaaa acggagccac ctcagggcga agaccaagtc
 1200
 gacatctgca acctcaggag taagctcagg cctgccaagt cccaagacaa gtcttgttg
 1260
 gatggggagg gccccaggc agtagggggc caagacgtgg ccttcagccg aagctt
 1316

<210> 1494

<211> 438

<212> PRT

<213> Homo sapiens

<400> 1494

Xaa	Tyr	Gln	Gly	Lys	Glu	Gly	Trp	Ala	Pro	Ala	Ser	Tyr	Leu	Lys	Lys
1				5				10					15		
Asn	Ser	Gly	Glu	Pro	Leu	Pro	Pro	Lys	Pro	Gly	Pro	Gly	Ser	Pro	Ser
			20					25					30		
His	Pro	Gly	Ala	Leu	Asp	Leu	Asp	Gly	Val	Ser	Arg	Gln	Gln	Asn	Ala
			35					40					45		
Val	Gly	Arg	Glu	Lys	Glu	Leu	Ser	Ser	Gln	Arg	Asp	Gly	Arg	Phe	
			50					55				60			
Glu	Gly	Arg	Pro	Val	Pro	Asp	Gly	Asp	Ala	Lys	Gln	Arg	Ser	Pro	Lys
65						70				75				80	
Met	Arg	Gln	Arg	Pro	Pro	Pro	Arg	Arg	Asp	Met	Thr	Ile	Pro	Arg	Gly

```
<400> 1495
agatctctgt cccgtagagg tgccacctca tctccatga gagctgtgct ttgttttctt
60
```

ctggaggctg caaggaggat ggcccccatc acggcggacc tacatgctgg gagtcggga
 120
 gagggcagggc cgcggacatg gggcatgtgg cgatgtgttt caccaccac tccgcctga
 180
 agtgccactg tgagcccaac ccacggtgcc aggetgggct gcactccagg ctctgcagc
 240
 agaccacact cctcagcctc cttcccctga aggetgggca tggcctggac aaaggggtgc
 300
 ctctctgct gtgccatgct gacgtggca
 329

<210> 1496

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1496

Met	Ala	Gln	Gln	Arg	Arg	Thr	Pro	Phe	Val	Gln	Ala	Met	Pro	Ser	Leu
1				5					10					15	
Gln	Gly	Lys	Glu	Ala	Glu	Glu	Val	Gly	Leu	Leu	Gln	Glu	Pro	Gly	Val
		20						25					30		
Gln	Pro	Ser	Leu	Ala	Pro	Trp	Val	Gly	Leu	Thr	Val	Ala	Leu	Gln	Ala
		35				40					45				
Gly	Val	Gly	Gly	Glu	Thr	His	Arg	His	Met	Pro	His	Val	Arg	Gly	Leu
	50					55					60				
Pro	Ser	Pro	Gly	Leu	Pro	Ala	Cys	Arg	Ser	Ala	Val	Met	Gly	Ala	Ile
65				70					75					80	
Leu	Leu	Ala	Ala	Ser	Arg	Arg	Lys	Gln	Ser	Thr	Ala	Leu	Met	Glu	Asp
			85					90						95	
Glu	Val	Ala	Pro	Leu	Arg	Asp	Arg	Asp							
			100					105							

<210> 1497

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1497

naacttcttg cactcactca ggcgcacggt tggcggccga cttggaagcc gctgcagcac
 60
 ttgacgcggg gcgatctcga agcgttcggt cttggcctga cggtcgatgg ctgcggcgtg
 120
 ccgttgatcg cgcgaatgcg acgggtgggg cagggcgtgc ggccgacacc accgcaagaa
 180
 cgcaactcac ggcagatgaa tctgttttga aacgcaagga agggtaatga caggcaccga
 240
 caagaagcgg atccgcgagc tgctgcgtgt tgagctcact gaacttaccg gcccgatcga
 300
 gcagccttac gcgcccgatg cacgtcattc tttcgggcca cgcgt
 345

<210> 1498

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1498

```

Met Thr Cys Ile Gly Arg Val Arg Leu Leu Asp Arg Ala Gly Lys Phe
 1           5           10           15
Ser Glu Leu Asn Thr Gln Gln Leu Arg Asp Pro Leu Leu Val Gly Ala
          20           25           30
Cys His Tyr Pro Ser Leu Arg Phe Lys Thr Asp Ser Ser Ala Val Ser
          35           40           45
Cys Val Leu Ala Val Val Ser Ala Ala Arg Pro Ala Pro Pro Val Ala
          50           55           60
Phe Ala Arg Ser Thr Ala Arg Arg Ser His Arg Pro Ser Gly Gln Asp
65           70           75           80
Arg Thr Leu Arg Asp Arg Pro Ala Ser Ser Ala Ala Ala Ser Lys
          85           90           95
Ser Ala Ala Asn Arg Ala Pro Glu
          100

```

<210> 1499

<211> 402

<212> DNA

<213> Homo sapiens

<400> 1499

```

aaatatattc tgccagagtt tgaacacgac accatgctct ggcatttggg catgtcgggg
60
agtttccgctc tatgcgagag caatgaagaa ttacgcaaac atgaccatct aatcattcag
120
tttgaagata tcgaactgcg ttatcatgat cctcgccggt ttggttgcat tctttggctg
180
gatgcacaat cacaaagcaa attaatagat acgctggggc cagaaccctt aagcgagaac
240
tttaatgcgg agtatttatt tgaaaaattg aagaataaaa aggttggcac caaagttgca
300
attatggata accatgtggt ggtgggcgta ggcaatattt atgcgaccga aagtctgttt
360
aatctgggga ttcattccagc acaaccggcc tcgactttaa gc
402

```

<210> 1500

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1500

```

Lys Tyr Ile Leu Pro Glu Phe Glu His Asp Thr Met Leu Trp His Leu
 1           5           10           15
Gly Met Ser Gly Ser Phe Arg Leu Cys Glu Ser Asn Glu Glu Leu Arg
          20           25           30
Lys His Asp His Leu Ile Ile Gln Phe Glu Asp Ile Glu Leu Arg Tyr
          35           40           45
His Asp Pro Arg Arg Phe Gly Cys Ile Leu Trp Leu Asp Ala Gln Ser
          50           55           60
Gln Ser Lys Leu Ile Asp Thr Leu Gly Pro Glu Pro Leu Ser Glu Asn

```

```

65          70          75          80
Phe Asn Ala Glu Tyr Leu Phe Glu Lys Leu Lys Asn Lys Lys Val Gly
      85          90          95
Thr Lys Val Ala Ile Met Asp Asn His Val Val Val Gly Val Gly Asn
      100        105        110
Ile Tyr Ala Thr Glu Ser Leu Phe Asn Leu Gly Ile His Pro Ala Gln
      115        120        125
Pro Ala Ser Thr Leu Ser
      130

```

<210> 1501

<211> 362

<212> DNA

<213> Homo sapiens

<400> 1501

```

nnacgcgtgc atgctgcagg catcatccat cgcgatctga agccccaaaa catcttctctg
60
gtgccgagcg cgcgcgagcg cgacttcgtg aagatcttcg acttcggcgc atgccagatg
120
gtcacaccga aggtatcgaa cggcgtgccc gagctgaaga cgagcgcggg aaatctcttc
180
ggcäcgggtgc cgtacatggc gccggagtgc ttcgaggacg gctcgcaccg gctggatgcg
240
cgcgcggaca tctactccac gggcatcatc atgtaccgct gcgtgacggg gacgctcccc
300
ttcaaggcga acaccgtctt cgagatgctc atccatctgc gcgagggccg cccatcaagc
360
tt
362

```

<210> 1502

<211> 120

<212> PRT

<213> Homo sapiens

<400> 1502

```

Xaa Arg Val His Ala Ala Gly Ile Ile His Arg Asp Leu Lys Pro Gln
 1          5          10          15
Asn Ile Phe Leu Val Pro Ser Ala Arg Glu Arg Asp Phe Val Lys Ile
      20          25          30
Phe Asp Phe Gly Ala Cys Gln Met Val Thr Pro Lys Val Ser Asn Gly
      35          40          45
Val Pro Glu Leu Lys Thr Ser Ala Gly Asn Leu Phe Gly Thr Val Pro
      50          55          60
Tyr Met Ala Pro Glu Cys Phe Glu Asp Gly Ser His Arg Leu Asp Ala
65          70          75          80
Arg Ala Asp Ile Tyr Ser Thr Gly Ile Ile Met Tyr Arg Cys Val Thr
      85          90          95
Gly Thr Leu Pro Phe Lys Ala Asn Thr Val Phe Glu Met Leu Ile His
      100        105        110
Leu Arg Glu Gly Arg Pro Ser Ser
      115        120

```

<210> 1503
 <211> 623
 <212> DNA
 <213> Homo sapiens

<400> 1503
 gccggcgtga ggcagagaaa cgtcctcgcc ctgtcattcc accctgaaga gactgacgac
 60
 gaccgggtac accgcacctg gttgcgccag gtgtctgagg aggtctgaca gttaccgcaa
 120
 gggctcatga cgaccctcc tgaacactgt tcaaagggcg acggcttacc attcctcgct
 180
 gtgagtcctg aacagcagct tctcgaatat gaccgacgtc atgtctggca cccctacgcc
 240
 ccgacgatcg gggcagaccc aatgcttgca gtgacggctg ccaacggagt ctggctgcag
 300
 ctgcatgatg gggaacaccg ccacgaggtc atcgatgcga tggcctcgctg gtggtgccag
 360
 attcacgggt accgaaaccc ggtcctcgac gaggccctca accgtcaaag ctcccagttc
 420
 agtcacgtca tgtttggcgg actcacccat aaggccgcgg ttgacgccgt catatcccta
 480
 gtgcgcctgg ccccgggggc cctcgaccgg atcttctctg ctgattccgg gtctgtcggc
 540
 gtcgaggtga gtctcaaatt ggctcgtcag gtgcaaactg ctgcaccgc agcgcgcggc
 600
 ggcactttga cgaggacacg cgt
 623

<210> 1504
 <211> 165
 <212> PRT
 <213> Homo sapiens

<400> 1504
 Met Thr Thr Pro Pro Glu His Cys Ser Lys Gly Asp Gly Leu Pro Phe
 1 5 10 15
 Leu Ala Val Ser Pro Glu Gln Gln Leu Leu Glu Tyr Asp Arg Arg His
 20 25 30
 Val Trp His Pro Tyr Ala Pro Thr Ile Gly Ala Asp Pro Met Leu Ala
 35 40 45
 Val Thr Ala Ala Asn Gly Val Trp Leu Gln Leu His Asp Gly Glu His
 50 55 60
 Arg His Glu Val Ile Asp Ala Met Ala Ser Trp Trp Cys Gln Ile His
 65 70 75 80
 Gly Tyr Arg Asn Pro Val Leu Asp Glu Ala Leu Asn Arg Gln Ser Ser
 85 90 95
 Gln Phe Ser His Val Met Phe Gly Gly Leu Thr His Lys Ala Ala Val
 100 105 110
 Asp Ala Val Ile Ser Leu Val Arg Leu Ala Pro Gly Pro Leu Asp Arg
 115 120 125
 Ile Phe Leu Ala Asp Ser Gly Ser Val Gly Val Glu Val Ser Leu Lys
 130 135 140
 Leu Ala Arg Gln Val Gln Ile Ala Arg Thr Ala Ala Arg Gly Gly Thr

1244

130		135		140
Gly Gln Leu Ala Asp	Gly Ile Asp Gln Phe Thr	Gly Asn Leu Val Gly		
145	150	155	160	
Tyr Arg Thr Glu Ile	Arg Gln Tyr Ala			
	165			

<210> 1507
 <211> 667
 <212> DNA
 <213> Homo sapiens

<400> 1507
 agatctctta agatgtgctc attatcatga gaacagcgtg gaggaaccca cccccaggat
 60
 ccagttacct ccacttgctc tgcccttggc acgtggggct tatggggatt acaattcaag
 120
 gtgagacttg ggtggggaca cagtgggaaca tgaagtgtgc cacgctgggt ggatgacgcc
 180
 ctccctcccc cgccaccgag agctgcaggc cacatgattc cttttgggta gcactcggga
 240
 aagggcagaa tgtacaggaa cagagtgaga ttgcgagggc ctggggctga gggaggggac
 300
 gcactagagg aaggcaaagg ggagcctcct ggggtgtggg agcactttct gtcttggttt
 360
 tgggtgtggc tgcacagtgg cccacacccg tcagagctca cctgcctgca cccaggccct
 420
 ccgtgcaccc tggcagccca gatgactgca ccagcccagg ggaggtggag gaatgccaca
 480
 cgcaccggta cctggggacc gggggctctc ggtgatcatc ccgagctcca agacagaagc
 540
 tggactacag ccgtgctgag tggaggggtt tgggtggctgg gtgcccgcct cctattgtct
 600
 ctgcagactc tgggggtctcg ggcgccccca gtggggcaat gtgggctgct gcaggggaact
 660
 cacgcgt
 667

<210> 1508
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 1508
 Met Tyr Arg Asn Arg Val Arg Phe Ala Gly Pro Gly Ala Glu Gly Gly
 1 5 10 15
 Asp Ala Leu Glu Glu Gly Lys Gly Glu Pro Pro Gly Cys Gly Glu His
 20 25 30
 Phe Leu Ser Trp Phe Trp Trp Trp Leu His Ser Gly Pro His Pro Ser
 35 40 45
 Glu Leu Thr Cys Leu His Pro Gly Pro Pro Cys Thr Leu Ala Ala Gln
 50 55 60
 Met Thr Ala Pro Ala Gln Gly Arg Trp Arg Asn Ala Thr Arg Thr Gly
 65 70 75 80
 Thr Trp Gly Pro Gly Val Leu Gly Asp His Pro Glu Leu Gln Asp Arg

1246

<212> DNA

<213> Homo sapiens

<400> 1511

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gccggcaccg gcgtcaaggc catggcgctg ggcccgggat gggtacacac cgaattccac
60
tcacgcgccca acgtcaccgg caaccatctg ccggactttt tctggatcga cgccgaagtt
120
ctggtacgcg aggtctctca cgaccttgac catgacaagg tagtatccat tcctaccccg
180
ctctggaagt tcttcatcgc agtggccaca cataccccac gttccgctat gagattcctg
240
tcacgaactc tgtcctcgtc tcgagacaag gacgaccatc ctcgacacac tccgggaggc
300
gaggcctgag atggccagcg tcaaaccac taaggaccgg ggccggtaca ccaatgatct
360
gtccgcgcg acgcggcagg cagcgaacat gcttctgctg cgtcctttgg tgtggaaagt
420
cgtaaagtg agcgtccacg gagccgacaa cctcgacggg ctcgacggtg ccttacgctg
480
ccgtcgctaa ccattcctcc cacctcgacg cgccgctcgt ttttggggcc cttcccaage
540
ggctgtcaaa gtacctagct accggggccg ctgctgacta tttcttcacc gtctggtgga
600
aggccatcgc tccggtgctc ttcttcaacg cgt
633

```

<210> 1512

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1512

```

Ala Gly Thr Gly Val Lys Ala Met Ala Leu Gly Pro Gly Trp Val His
1           5           10           15
Thr Glu Phe His Ser Arg Ala Asn Val Thr Gly Asn His Leu Pro Asp
20           25           30
Phe Phe Trp Ile Asp Ala Glu Val Leu Val Arg Glu Ala Leu Asn Asp
35           40           45
Leu Asp His Asp Lys Val Val Ser Ile Pro Thr Pro Leu Trp Lys Phe
50           55           60
Phe Ile Ala Val Ala Thr His Thr Pro Arg Ser Ala Met Arg Phe Leu
65           70           75           80
Ser Arg Thr Leu Ser Ser Ser Arg Asp Lys Asp Asp His Pro Arg His
85           90           95
Thr Pro Gly Gly Glu Ala
100

```

<210> 1513

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1513

acgcgtgaag ggggtgaatt tcaccacaga ggggacgccg gggttcctgt tcagaaatat
 60
 ttggtcgtcc aatctcgtaa tgcccttctg aatgacttgc tgggcctgcc tcctgacacg
 120
 gctgtttcgc aggaaccgcc actcccgtc cttgcggatc tgactctcca ggtcgtgctc
 180
 ttctgggac ttcattgacgg gctgggtaaa atagccgggc gctccagtcg cagaaccccg
 240
 tctgcaccgt ggcggagatg aaacttttgt gtccagcagc atcgtccgcg tcgtccgcag
 300
 tctgctctgg gcccttctg aacatcttcc gtgtccgggg gaactggtgg gaggtagggg
 360
 tgtactgcgc cccagcgggg cctgtggtgc ccggccggcc g
 401

<210> 1514

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1514

Met	Phe	Asp	Lys	Gly	Pro	Glu	Gln	Thr	Ala	Asp	Asp	Ala	Asp	Ala
1				5					10				15	
Ala	Gly	His	Lys	Ser	Phe	Ile	Ser	Ala	Thr	Val	Gln	Thr	Gly	Phe
			20					25				30		Cys
Asp	Trp	Ser	Ala	Arg	Leu	Phe	Tyr	Pro	Ala	Arg	His	Glu	Asp	Pro
		35					40					45		Arg
Arg	Ala	Arg	Pro	Gly	Glu	Ser	Asp	Pro	Gln	Gly	Ala	Gly	Val	Ala
	50					55				60				Val
Pro	Ala	Lys	Gln	Pro	Cys	Gln	Glu	Ala	Gly	Pro	Ala	Ser	His	Ser
65					70				75				80	Glu
Gly	His	Tyr	Glu	Ile	Gly	Arg	Pro	Asn	Ile	Ser	Glu	Gln	Glu	Pro
			85					90					95	Arg
Arg	Pro	Leu	Cys	Gly	Glu	Ile	Pro	Pro	Leu	His	Ala			
			100					105						

<210> 1515

<211> 720

<212> DNA

<213> Homo sapiens

<400> 1515

nnggacccctg accgcggcat gaggttcaac cctgccaaagc tattgctcga cccttatgccc
 60
 agggccatca cggcaggagt cgattatcac ggcccgatta tggaccacac gccggaatcc
 120
 aactacgagc ctgacctgac cgacgatgcg acgtcgggtcc cgctcgccgt cgtcattgac
 180
 gatccccgcc cgcctacgcc tattgcgcgc cgccacgaca tcagcgaatc gggcatctat
 240
 gagacccatg tcaaagggtt aaccgcctt caccacctcg ttctgagca tcttcgcagc
 300
 acctatgccg ggcttgcccta tccggctgtt atcgaacacc tcaagtcaat cggagtaaca
 360

gccatcgaac tactaccggt ccagcagttc gtctccgaac cattcatcgt tgggcgcggc
 420
 ttatccgatt actgggggta caacaccctg gggttctttg cgccgcatgc tgcctactgc
 480
 tccgtcggct cgatgggaac ccaggtgcgc gagttcaagg acatgggtgac gtctttccac
 540
 gaagccggca tccgaggtttt cctcgaatgc gtctacaacc aactgggtga gggcggccat
 600
 gaaggaccga ctctgtcttt cgcgggcac gatcacgagt cttattaccg cctcaccaac
 660
 gatcaccgca atgactatga cgtcaccggg tgtggcaatt ctgtcgacac ctcccatccg
 720

<210> 1516

<211> 240

<212> PRT

<213> Homo sapiens

<400> 1516

Xaa	Asp	Pro	Asp	Arg	Gly	Met	Arg	Phe	Asn	Pro	Ala	Lys	Leu	Leu	Leu
1				5					10					15	
Asp	Pro	Tyr	Ala	Arg	Ala	Ile	Thr	Ala	Gly	Val	Asp	Tyr	His	Gly	Pro
			20					25					30		
Ile	Met	Asp	His	Thr	Pro	Glu	Ser	Asn	Tyr	Glu	Pro	Asp	Leu	Thr	Asp
		35					40					45			
Asp	Ala	Thr	Ser	Val	Pro	Leu	Ala	Val	Val	Ile	Asp	Asp	Pro	Gly	Pro
	50					55				60					
Pro	Thr	Pro	Ile	Ala	Arg	Arg	His	Asp	Ile	Ser	Glu	Ser	Gly	Ile	Tyr
65					70				75					80	
Glu	Thr	His	Val	Lys	Gly	Leu	Thr	Arg	Leu	His	Pro	Leu	Val	Pro	Glu
			85					90					95		
His	Leu	Arg	Ser	Thr	Tyr	Ala	Gly	Leu	Ala	Tyr	Pro	Ala	Val	Ile	Glu
		100					105					110			
His	Leu	Lys	Ser	Ile	Gly	Val	Thr	Ala	Ile	Glu	Leu	Leu	Pro	Val	Gln
		115					120					125			
Gln	Phe	Val	Ser	Glu	Pro	Phe	Ile	Val	Gly	Arg	Gly	Leu	Ser	Asp	Tyr
	130					135				140					
Trp	Gly	Tyr	Asn	Thr	Leu	Gly	Phe	Phe	Ala	Pro	His	Ala	Ala	Tyr	Cys
145					150				155					160	
Ser	Val	Gly	Ser	Met	Gly	Thr	Gln	Val	Arg	Glu	Phe	Lys	Asp	Met	Val
			165					170					175		
Thr	Ser	Phe	His	Glu	Ala	Gly	Ile	Glu	Val	Phe	Leu	Asp	Val	Val	Tyr
		180					185					190			
Asn	His	Thr	Gly	Glu	Gly	Gly	His	Glu	Gly	Pro	Thr	Leu	Ser	Phe	Arg
		195					200					205			
Gly	Ile	Asp	His	Glu	Ser	Tyr	Tyr	Arg	Leu	Thr	Asn	Asp	His	Arg	Asn
	210					215					220				
Asp	Tyr	Asp	Val	Thr	Gly	Cys	Gly	Asn	Ser	Val	Asp	Thr	Ser	His	Pro
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<210> 1517

<211> 497

<212> DNA

<213> Homo sapiens

<400> 1517

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 120
 tccttttcca tcgggctgca agtactgttt ccattcctcc tggcaggctt tgggaccgtg
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 gctgctggca tgggtgttga catcgtgcag cactgggaag tcttccagaa ggtgacagag
 240
 gtcttcatcc tagtgctgc gctgctgggg ctcaaaggga acctggaaat gaccctggca
 300
 tcaaggcttt ccactgcagc caacattgga cacatggaca cacccaagga gctctggcgg
 360
 atgatcactg ggaacatggc cctcatccag gtgcaggccc cgggtggtggg cttcctggcg
 420
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 480
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 497

<210> 1518

<211> 165

<212> PRT

<213> Homo sapiens

<400> 1518

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Ser	Gln	Ser	Asn	Glu	Ser	Asp	Asp	Val	Ser	Thr	Asp	Arg	Gly	Pro	Ala
			20				25						30		
Pro	Pro	Ser	Pro	Leu	Lys	Glu	Thr	Ser	Phe	Ser	Ile	Gly	Leu	Gln	Val
		35				40						45			
Leu	Phe	Pro	Phe	Leu	Leu	Ala	Gly	Phe	Gly	Thr	Val	Ala	Ala	Gly	Met
	50				55					60					
Val	Leu	Asp	Ile	Val	Gln	His	Trp	Glu	Val	Phe	Gln	Lys	Val	Thr	Glu
65				70					75					80	
Val	Phe	Ile	Leu	Val	Pro	Ala	Leu	Leu	Gly	Leu	Lys	Gly	Asn	Leu	Glu
			85					90					95		
Met	Thr	Leu	Ala	Ser	Arg	Leu	Ser	Thr	Ala	Ala	Asn	Ile	Gly	His	Met
		100					105					110			
Asp	Thr	Pro	Lys	Glu	Leu	Trp	Arg	Met	Ile	Thr	Gly	Asn	Met	Ala	Leu
		115				120						125			
Ile	Gln	Val	Gln	Ala	Pro	Val	Val	Gly	Phe	Leu	Ala	Ser	Ile	Ala	Ala
	130					135					140				
Val	Val	Phe	Gly	Trp	Ile	Pro	Asp	Gly	His	Phe	Ser	Ile	Pro	His	Ala
145					150					155					160
Phe	Leu	Leu	Cys	Gly											
				165											

<210> 1519

<211> 2076

<212> DNA

<213> Homo sapiens

<400> 1519

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120
cttacaaaaa ttgaaggagt gctctctggg gatccacttg atctgaaaat gtttgaggct
180
attggatgga ttctggaaga agcaactgaa gaagaaacag cacttcataa tcgaattatg
240
cccacagtgg ttctgcctcc caaacaactg ctctctgaat ctaccctgc aggaaccaa
300
gaaatggagc tgtttgaact tccagctact tatgagatag gaattgttcg ccagttccca
360
ttttcttctg ctttgcaacg tatgagtgtg gttgccaggg tgctggggga taggaaaatg
420
gacgcctaca tgaagggagc gcccgaggcc attgccggtc tctgtaaacc tgaacagtt
480
cctgtcgatt ttcaaaacgt tttggaagac ttcactaaac agggcttccg tgtgattgct
540
cttgacaca gaaaattgga gtcaaaactg acatggcata agtacagaa tattagcaga
600
gatgcaattg agaacaacat ggattttatg ggattaatta taatgcagaa caaattaaag
660
caagaaaccc ctgcagtact tgaagatttg cataaagcca acattcgcac cgtcatggtc
720
acaggtgaca gtatgttgac tgctgtctct gtggccagag attgtggaat gattctacct
780
caggataaag tgattattgc tgaagcatta cctccaaagg atgggaaagt tgccaaaata
840
aattggcatt atgcagactc cctcacgcag tgcagtcac catcagcaat tgaccagag
900
gctattccgg ttaaattggg ccatgatagc ttagaggatc ttcaaatgac tcgttatcat
960
tttgcaatga atggaaaatc attctcagtg atactggagc attttcaaga cttgttctc
1020
aagtgtatgt tgcattggac cgtgtttgcc cgtatggcac ctgatcagaa gacacagttg
1080
atagaagcat tgcaaaatgt tgattatatt gttgggatgt gtggtgatgg cgcaaatgat
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tgtgtgtctt tgaagagggc acacggaggc atttccttat cggagctcga agcttcagtg
1200
gcatctccct ttacctctaa gactcctagt atttcctgtg tgccaaacct tatcagggaa
1260
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1320
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1380
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1440
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1500
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1560

gtcaaacagc aaccttggtg tgaagtgtgg catccaaaat cagatgcttg taatacaaca
 1620
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 1680
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 1740
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 1800
 gttttttctg tgattttttt atatattttt atattattca tcatgttgta tccagttgcc
 1860
 tctgttgacc aggttcttca gatagtgtgt gtaccatata agtggcgtgt aactatgctc
 1920
 atcattgttc ttgtcaatgc ctttgtgtct atcacagtgg agaacttctt ccttgacatg
 1980
 gtcctttgga aagttgtggt caaccgagac aaacaaggag agtatcggtt cagcaccaca
 2040
 cagccaccgc aggagtcagt ggatcgggtg ggaaaa
 2076

<210> 1520

<211> 692

<212> PRT

<213> Homo sapiens

<400> 1520

Xaa	Asp	Leu	Trp	Gly	Ile	Gln	Arg	Val	Glu	Asn	Ala	Arg	Phe	Leu	Ser
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Pro	Glu	Glu	Asn	Val	Cys	Asn	Glu	Met	Leu	Val	Lys	Ser	Gln	Phe	Val
			20					25					30		
Ala	Cys	Met	Ala	Thr	Cys	His	Ser	Leu	Thr	Lys	Ile	Glu	Gly	Val	Leu
		35					40					45			
Ser	Gly	Asp	Pro	Leu	Asp	Leu	Lys	Met	Phe	Glu	Ala	Ile	Gly	Trp	Ile
	50					55				60					
Leu	Glu	Glu	Ala	Thr	Glu	Glu	Glu	Thr	Ala	Leu	His	Asn	Arg	Ile	Met
65					70				75					80	
Pro	Thr	Val	Val	Arg	Pro	Pro	Lys	Gln	Leu	Leu	Pro	Glu	Ser	Thr	Pro
				85				90						95	
Ala	Gly	Asn	Gln	Glu	Met	Glu	Leu	Phe	Glu	Leu	Pro	Ala	Thr	Tyr	Glu
		100					105					110			
Ile	Gly	Ile	Val	Arg	Gln	Phe	Pro	Phe	Ser	Ser	Ala	Leu	Gln	Arg	Met
	115					120					125				
Ser	Val	Val	Ala	Arg	Val	Leu	Gly	Asp	Arg	Lys	Met	Asp	Ala	Tyr	Met
	130					135				140					
Lys	Gly	Ala	Pro	Glu	Ala	Ile	Ala	Gly	Leu	Cys	Lys	Pro	Glu	Thr	Val
145				150					155					160	
Pro	Val	Asp	Phe	Gln	Asn	Val	Leu	Glu	Asp	Phe	Thr	Lys	Gln	Gly	Phe
			165					170					175		
Arg	Val	Ile	Ala	Leu	Ala	His	Arg	Lys	Leu	Glu	Ser	Lys	Leu	Thr	Trp
		180					185					190			
His	Lys	Val	Gln	Asn	Ile	Ser	Arg	Asp	Ala	Ile	Glu	Asn	Asn	Met	Asp
	195					200					205				
Phe	Met	Gly	Leu	Ile	Ile	Met	Gln	Asn	Lys	Leu	Lys	Gln	Glu	Thr	Pro
	210					215					220				
Ala	Val	Leu	Glu	Asp	Leu	His	Lys	Ala	Asn	Ile	Arg	Thr	Val	Met	Val


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225          230          235          240
Thr Gly Asp Ser Met Leu Thr Ala Val Ser Val Ala Arg Asp Cys Gly
          245          250          255
Met Ile Leu Pro Gln Asp Lys Val Ile Ile Ala Glu Ala Leu Pro Pro
          260          265          270
Lys Asp Gly Lys Val Ala Lys Ile Asn Trp His Tyr Ala Asp Ser Leu
          275          280          285
Thr Gln Cys Ser His Pro Ser Ala Ile Asp Pro Glu Ala Ile Pro Val
          290          295          300
Lys Leu Val His Asp Ser Leu Glu Asp Leu Gln Met Thr Arg Tyr His
305          310          315          320
Phe Ala Met Asn Gly Lys Ser Phe Ser Val Ile Leu Glu His Phe Gln
          325          330          335
Asp Leu Val Pro Lys Leu Met Leu His Gly Thr Val Phe Ala Arg Met
          340          345          350
Ala Pro Asp Gln Lys Thr Gln Leu Ile Glu Ala Leu Gln Asn Val Asp
          355          360          365
Tyr Phe Val Gly Met Cys Gly Asp Gly Ala Asn Asp Cys Gly Ala Leu
          370          375          380
Lys Arg Ala His Gly Gly Ile Ser Leu Ser Glu Leu Glu Ala Ser Val
385          390          395          400
Ala Ser Pro Phe Thr Ser Lys Thr Pro Ser Ile Ser Cys Val Pro Asn
          405          410          415
Leu Ile Arg Glu Gly Arg Ala Ala Leu Ile Thr Ser Phe Cys Val Phe
          420          425          430
Lys Phe Met Ala Leu Tyr Ser Ile Ile Gln Tyr Phe Ser Val Thr Leu
          435          440          445
Leu Tyr Ser Ile Leu Ser Asn Leu Gly Asp Phe Gln Phe Leu Phe Ile
          450          455          460
Asp Leu Ala Ile Ile Leu Val Val Val Phe Thr Met Ser Leu Asn Pro
465          470          475          480
Ala Trp Lys Glu Leu Val Ala Gln Arg Pro Pro Ser Gly Leu Ile Ser
          485          490          495
Gly Ala Leu Leu Phe Ser Val Leu Ser Gln Ile Ile Ile Cys Ile Gly
          500          505          510
Phe Gln Ser Leu Gly Phe Phe Trp Val Lys Gln Gln Pro Trp Tyr Glu
          515          520          525
Val Trp His Pro Lys Ser Asp Ala Cys Asn Thr Thr Gly Ser Gly Phe
          530          535          540
Trp Asn Ser Ser His Val Asp Asn Glu Thr Glu Leu Asp Glu His Asn
545          550          555          560
Ile Gln Asn Tyr Glu Asn Thr Thr Val Phe Phe Ile Ser Ser Phe Gln
          565          570          575
Tyr Leu Ile Val Ala Ile Ala Phe Ser Lys Gly Lys Pro Phe Arg Gln
          580          585          590
Pro Cys Tyr Lys Asn Tyr Phe Phe Val Phe Ser Val Ile Phe Leu Tyr
          595          600          605
Ile Phe Ile Leu Phe Ile Met Leu Tyr Pro Val Ala Ser Val Asp Gln
          610          615          620
Val Leu Gln Ile Val Cys Val Pro Tyr Gln Trp Arg Val Thr Met Leu
625          630          635          640
Ile Ile Val Leu Val Asn Ala Phe Val Ser Ile Thr Val Glu Asn Phe
          645          650          655
Phe Leu Asp Met Val Leu Trp Lys Val Val Phe Asn Arg Asp Lys Gln

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<210> 1521
<211> 373
<212> DNA
<213> Homo sapiens
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<210> 1522
<211> 94
<212> PRT
<213> Homo sapiens
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<210> 1523
<211> 525
<212> DNA
<213> Homo sapiens
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1254

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 aatatgcaag aagcatcgac tcagctggaa gactctctcc tggggaagat gctggagacg
 180
 tgtggagatg ctgagaatca gctggctctc gagctctccc agcacgaagt ctttggtgag
 240
 aaggagatcg tggaccctct gtacggcata gctgaggtgg agattcccaa catccagaag
 300
 cagaggaagc agcttgcaag attggtgtta gactgggatt cagtcagagc caggtggaac
 360
 caagctcaca aatcctcagg aaccaacttt caggggcttc catcaaaaat agatactcta
 420
 aaggaaggga tggatgaagc tggaaataaa gtagaacagt gcaaggatca acttgcagca
 480
 gacatgtaca actttatggc caaagaaggg gagtatggca aattt
 525

<210> 1524

<211> 175

<212> PRT

<213> Homo sapiens

<400> 1524

Xaa	Arg	Val	Arg	Ser	Ile	Cys	Arg	His	Ser	His	Lys	Arg	Leu	Val	Ala
1				5					10					15	
Cys	Phe	Gln	Gly	Gln	His	Gly	Thr	Asp	Ala	Glu	Arg	Arg	His	Lys	Lys
		20						25					30		
Leu	Pro	Leu	Thr	Ala	Leu	Ala	Gln	Asn	Met	Gln	Glu	Ala	Ser	Thr	Gln
		35					40					45			
Leu	Glu	Asp	Ser	Leu	Leu	Gly	Lys	Met	Leu	Glu	Thr	Cys	Gly	Asp	Ala
	50					55					60				
Glu	Asn	Gln	Leu	Ala	Leu	Glu	Leu	Ser	Gln	His	Glu	Val	Phe	Val	Glu
65					70					75					80
Lys	Glu	Ile	Val	Asp	Pro	Leu	Tyr	Gly	Ile	Ala	Glu	Val	Glu	Ile	Pro
			85					90						95	
Asn	Ile	Gln	Lys	Gln	Arg	Lys	Gln	Leu	Ala	Arg	Leu	Val	Leu	Asp	Trp
		100					105						110		
Asp	Ser	Val	Arg	Ala	Arg	Trp	Asn	Gln	Ala	His	Lys	Ser	Ser	Gly	Thr
		115					120					125			
Asn	Phe	Gln	Gly	Leu	Pro	Ser	Lys	Ile	Asp	Thr	Leu	Lys	Glu	Gly	Met
	130					135					140				
Asp	Glu	Ala	Gly	Asn	Lys	Val	Glu	Gln	Cys	Lys	Asp	Gln	Leu	Ala	Ala
145					150					155					160
Asp	Met	Tyr	Asn	Phe	Met	Ala	Lys	Glu	Gly	Glu	Tyr	Gly	Lys	Phe	
			165					170						175	

<210> 1525

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1525

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 120
 ctgcgtttctt ccctggacta tgaatatgaa ctgccgatgg cccagatgaa ccggcgttta
 180
 tctggcatcg atacggctctt ttgcttacc gatgaaaagt acggctacat cagctcatcg
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 294

<210> 1526
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1526
 Val His Glu Arg Met Asp Leu Ile Arg Gln Ser Val Asp Ala Arg Ile
 1 5 10 15
 Asn Val Asp Tyr Trp Ser Gly Leu Leu Val Asp Tyr Thr Ser Gln His
 20 25 30
 Gly Val Asp Val Leu Val Lys Gly Leu Arg Ser Ser Leu Asp Tyr Glu
 35 40 45
 Tyr Glu Leu Pro Met Ala Gln Met Asn Arg Arg Leu Ser Gly Ile Asp
 50 55 60
 Thr Val Phe Leu Leu Thr Asp Glu Lys Tyr Gly Tyr Ile Ser Ser Ser
 65 70 75 80
 Leu Cys Lys Gln Val Ala Gln Phe Gly Gly Glu Val Thr Gly Met Leu
 85 90 95
 Arg Ile

<210> 1527
 <211> 371
 <212> DNA
 <213> Homo sapiens

<400> 1527
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 120
 acttcgccct ggtgcacggg gttggcatga ccggcgagta cccttgggtg gtgcaccgag
 180
 aagacattga cgcgctgggt tacgacggtg tggtcgaggc cggcatgacc atctgtgtgg
 240
 aaagctacat cggccacgac gacggcgggc aaggcgtgaa gctcgaagaa cagatctaca
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 tccacgaaca cagcatcgag ttgctctccg attatccggt cgacccacgc ctgttgccgc
 360
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 371

<210> 1528
 <211> 109
 <212> PRT

<213> Homo sapiens

<400> 1528

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Met Glu Met Leu Lys Ala Gly Arg Ser Phe Lys Glu Tyr Ala Glu Met
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Ala Trp Lys Ile Pro Glu His Tyr Lys Asn Asn Arg Tyr Phe Ala Leu
      20           25           30
Val His Gly Val Gly Met Thr Gly Glu Tyr Pro Trp Val Val His Arg
      35           40           45
Glu Asp Ile Asp Ala Leu Gly Tyr Asp Gly Val Phe Glu Ala Gly Met
      50           55           60
Thr Ile Cys Val Glu Ser Tyr Ile Gly His Asp Asp Gly Gly Glu Gly
65           70           75           80
Val Lys Leu Glu Glu Gln Ile Tyr Ile His Glu His Ser Ile Glu Leu
      85           90           95
Leu Ser Asp Tyr Pro Phe Asp Pro Arg Leu Leu Pro Arg
      100           105

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<210> 1529

<211> 609

<212> DNA

<213> Homo sapiens

<400> 1529

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120
gctcagggct cggccctccg gggacttgcg ctctgtccgg ctcagggctc gccctccgtg
180
ggacttgccg tctgtccggc tcagggctcg cctccgtggg gacttgccgt ctgtccggct
240
cagggctcgc cctccgtggg acttgccgtc tgtccggctc agggctcgcc ctccgtggga
300
tttgcgctct gtctggctca ggctgcgcag ggcaatggag gaacctcccg agcaggccca
360
ggggctcctt ccaccagcc cccatctccg gccggccatt tgtgagggcc tctgccactg
420
aggtgcactg ttccaattc ctcattcaca agctctacct tccacgagcc cagagcatga
480
acgcattcgg ccatggctct caccactctg cgaggagcac agcctcttct ccaccgtcca
540
atagcgtggt cctcctttcc caggcctcac agaatgctct gtccgcatcc tcccagcatt
600
ccattcacg
609

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<210> 1530

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1530

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Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala Leu

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      1             5             10             15
Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala Leu Cys Pro Ala
      20             25             30
Gln Gly Ser Pro Ser Val Gly Leu Ala Leu Cys Pro Ala Gln Gly Ser
      35             40             45
Pro Ser Val Gly Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val
      50             55             60
Gly Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala
      65             70             75             80
Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Phe Ala Leu Cys Leu
      85             90             95
Ala Gln Ala Ala Gln Gly Asn Gly Gly Thr Ser Arg Ala Gly Pro Ala
      100            105            110
Ala Pro Ser Thr Gln Pro Pro Ser Pro Ala Gly His Leu
      115            120            125

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<210> 1531

<211> 726

<212> DNA

<213> Homo sapiens

<400> 1531

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120
acattcggca agcatgagga cggggagcat cgagaccgcg acagctcggc gaaggaattt
180
cggggtggca ggcattggca aactagcttt ctgtgatcgg cgtgcgcggc cgggcaacaa
240
cagggcgctc tcaggtggtc ttcgggctcg acttcgtctc cgttcccggc accttcccag
300
tgcgcatggc caggtggttc aagtcggggc ggatcagtca taccgctgcg ctcagctccg
360
gcttttcacc ggattccagc gctggtgtgg tcaccagcaa cctgacgcga ggatttttagc
420
acccccttcg cataccgcta tccagggcct ccacgacagc ggcaccgatg acgatcgctt
480
tcaccgagcg cggcggtttc ggcagcttcc acatggggat cagaccatat tgatgcactg
540
gcgatccctt catacgcgag ccgccgatat ggcccccgag tgaggcccct cagttcgcgc
600
tgacgcatgc cgctctgcgc agcctgccaa cgctttcccg caacctcacc acacgtttgc
660
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720
cgagag
726

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<210> 1532

<211> 178

<212> PRT

<213> Homo sapiens

<400> 1532

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 20 25 30
 Gly Ser Ile Glu Thr Ala Thr Ala Arg Arg Arg Asn Phe Gly Val Ala
 35 40 45
 Gly Met Ala Lys Leu Ala Phe Cys Asp Arg Arg Ala Arg Pro Gly Asn
 50 55 60
 Asn Arg Ala Ser Ser Gly Gly Leu Arg Ala Arg Leu Arg Leu Arg Ser
 65 70 75 80
 Arg His Leu Pro Ser Ala His Gly Gln Val Val Gln Val Gly Ala Asp
 85 90 95
 Gln Ser Tyr Arg Cys Ala Gln Leu Arg Leu Phe Thr Gly Phe Gln Arg
 100 105 110
 Trp Cys Gly His Gln Gln Pro Asp Ala Arg Ile Leu Ala Pro Pro Ser
 115 120 125
 His Thr Ala Ile Gln Gly Leu His Asp Ser Gly Thr Asp Asp Asp Arg
 130 135 140
 Val His Arg Ala Arg Arg Phe Arg Gln Leu Pro His Gly Asp Gln Thr
 145 150 155 160
 Ile Leu Met His Trp Arg Ser Leu His Thr Arg Ala Ala Asp Met Ala
 165 170 175
 Pro Glu

<210> 1533

<211> 364

<212> DNA

<213> Homo sapiens

<400> 1533

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 gagattattc acagcgaacg ggcgaccggc ggtgcgcgcg ttaacgtcct gctgacgctg
 120
 gttaaaatgc acgtcggctt gccgttgacg gcggtcggtc ttatcggcga agacagcgat
 180
 ggcgattaca ttatggcgat gtcgaccag taccacgtca atcgccagcg ggtacagcgc
 240
 accacgtttg cccccacgtc gatgtcgcag gtgatgaccg atcccactgg gcagcgcacc
 300
 tttttccatt cgcctgccgc caatcgctg ctcgatctcc ccgcctttga tcgactcgac
 360
 gcgt
 364

<210> 1534

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1534

Xaa Met Leu Val Asp His Val His Gln Ile Val Gln Trp Pro Glu Arg

```

      1           5           10           15
Gly Trp Leu Ala Glu Ile Ile His Ser Glu Arg Ala Thr Gly Gly Ala
      20           25           30
Pro Leu Asn Val Leu Leu Thr Leu Val Lys Met His Val Gly Leu Pro
      35           40           45
Leu Gln Ala Val Gly Leu Ile Gly Glu Asp Ser Asp Gly Asp Tyr Ile
      50           55           60
Met Ala Met Leu Asp Gln Tyr His Val Asn Arg Gln Arg Val Gln Arg
65           70           75           80
Thr Thr Phe Ala Pro Thr Ser Met Ser Gln Val Met Thr Asp Pro Thr
      85           90           95
Gly Gln Arg Thr Phe Phe His Ser Pro Ala Ala Asn Arg Leu Leu Asp
      100          105          110
Leu Pro Ala Phe Asp Arg Leu Asp Ala
      115          120

```

<210> 1535

<211> 369

<212> DNA

<213> Homo sapiens

<400> 1535

```

gaattcgggg ggctccggga atgaagtttc catttcgcaa gccttctgaa gcaaataccgc
60
caatccctgg ggcccgcggt gcgtagccggc cagcggccag tcctggcccg gaatgatcca
120
ctcgatatct tcggcagaca acgccagcag accgggccta tcgccgcggc ccatggctgc
180
aaaaaaactc ttcacagtct ggacattccc ttgtgtgctc atcgaaatct ctccatgtcc
240
tttacctggg atcgtgtccg atctcatcgg acgcgttgag gacctgctgg tgaggacggg
300
gtgtcgggtga ttcagccgat atcgactttg catggcgatg tcccagctgc cggagccgtt
360
actggccac
369

```

<210> 1536

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1536

```

Met Gln Ser Arg Tyr Arg Leu Asn His Arg His Pro Val Leu Thr Ser
  1           5           10           15
Arg Ser Ser Thr Arg Pro Met Arg Ser Asp Thr Ile Pro Gly Lys Gly
      20           25           30
His Gly Glu Ile Ser Met Ser Thr Gln Gly Asn Val Gln Thr Val Lys
      35           40           45
Ser Phe Phe Ala Ala Met Gly Arg Gly Asp Arg Pro Gly Leu Leu Ala
      50           55           60
Leu Ser Ala Glu Asp Ile Glu Trp Ile Ile Pro Gly Gln Asp Trp Pro
65           70           75           80
Leu Ala Gly Thr His Arg Gly Pro Gln Gly Leu Ala Asp Leu Leu Gln

```


85 90 95
 Lys Ala Cys Glu Met Glu Thr Ser Phe Pro Glu Pro Pro Glu Phe
 100 105 110

<210> 1537
 <211> 294
 <212> DNA
 <213> Homo sapiens

<400> 1537
 ccactcgagg cgctcctga gccctctcgt gtgtcaggac gccagcatcc tgttcgtgtt
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 ctggtgggtg ctgcacgtgt accagcggaa gatcggcagc caggaggaca cctgcttgtt
 120
 cctcacgcgc ccggtggaga tgggtggcca gctggcgtg ctcaccgagg agacctcgtc
 180
 ggcgtggtgg agacactgac ccaccaggcc cgggcgacca cgggtgcatgc cgttcgggac
 240
 tcagaattgg ccaagctgcc ggcaggagcc ctcacgtcca tcaagcgag gtac
 294

<210> 1538
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1538
 Pro Leu Ala Ala Pro Pro Glu Pro Ser Arg Val Ser Gly Arg Gln His
 1 5 10 15
 Pro Val Arg Val Leu Gly Ala Ala Ala Arg Val Pro Ala Glu Asp Arg
 20 25 30
 Gln Pro Gly Gly His Leu Leu Val Pro His Ala Pro Arg Gly Asp Gly
 35 40 45
 Gly Pro Ala Gly Arg Ala His Arg Gly Asp Leu Val Gly Val Val Glu
 50 55 60
 Thr Leu Thr His Gln Ala Arg Ala Thr Thr Val His Ala Val Arg Asp
 65 70 75 80
 Ser Glu Leu Ala Lys Leu Pro Ala Gly Ala Leu Thr Ser Ile Lys Arg
 85 90 95
 Arg Tyr

<210> 1539
 <211> 1015
 <212> DNA
 <213> Homo sapiens

<400> 1539
 acgcgttcgg gcgtcaggca cacgcatctc aacagatgtg gctgacaccc aaggcagtcg
 60
 gcctcagtcg cctgtcacc acctagaacc tgttcacagc atgtcatccg ggctgctctg
 120
 gccttgactg gacatgatta tttatcctta cacaccgtgg ctgctctaca ggccaagaaa
 180

caggctgctc agccagggtc aggagaaggt gggtcaggct ccccggggac ctcaggccct
 240
 gacgcacccct ggcctcaccc taggcctcct ctgtcggggc agcctggctc agcagagccc
 300
 gggacacacg gctgaggcca cccaggctgg gccatcttgc ccctgttttg tgccccctac
 360
 tcagttctcc ttctgtcctg gctcaggctt aggccagtca agaggggtggc tgagaagcag
 420
 gaggagcctc agagaccctc ccctcgaaag cactggggct tccacctcac aagcggcagg
 480
 ttcgcttttg gagctgctgg tccatcgccc aggcctggcc aggggcaggc gaggatcctg
 540
 gttgccgac ccatgtccag gcctggccca ggagccggtg aggaacctgg ggctgttgtg
 600
 caggggtcgc cgtctccagc tctctgccgt ggtgagggga ttgtgctgtg tgcacaccac
 660
 ctggctgcat cgaatcccac catggcccag aggggtggacc tgtggctcct tggggggcca
 720
 gcateccccag tctaattgggt gccctgccca ctctctgag ttcccgtaga gagctcccc
 780
 caacacctca gccttcacct ttctcagtta atcaaaagat tccaaaaaaa gcaaacccat
 840
 cagaacggct tctccaccg agtggttcagg ataaataatc atgtccagtc aaggccagag
 900
 cagcccgat gacatgctat gaacagggtt taggtgggtg acagggcact gaggccgact
 960
 gccttgggtg tcagccacat ctgttgagat gcgtgtgcct gacgcccga cgcgt
 1015

<210> 1540

<211> 89

<212> PRT

<213> Homo sapiens

<400> 1540

His	Pro	Arg	Gln	Ser	Ala	Ser	Val	Pro	Cys	His	Pro	Pro	Arg	Thr	Cys
1				5					10					15	
Ser	Gln	His	Val	Ile	Arg	Ala	Ala	Leu	Ala	Leu	Thr	Gly	His	Asp	Tyr
			20					25					30		
Leu	Ser	Leu	His	Thr	Val	Ala	Ala	Leu	Gln	Ala	Lys	Lys	Gln	Ala	Ala
		35					40					45			
Gln	Pro	Gly	Ser	Gly	Glu	Gly	Gly	Ser	Gly	Ser	Pro	Gly	Thr	Ser	Gly
	50					55					60				
Pro	Asp	Ala	Ser	Trp	Pro	His	Pro	Arg	Pro	Pro	Leu	Ser	Gly	Gln	Pro
65					70					75				80	
Gly	Ser	Ala	Glu	Pro	Gly	Thr	His	Gly							
					85										

<210> 1541

<211> 1482

<212> DNA

<213> Homo sapiens

<400> 1541

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cccgccgctg ccgcctccga gcagcccgcc aggactctgg ctactggaga tgggcgcccc
120
gctatcgagg cgacgggtgc cggcggaccc gtccctggcc ctggacgcgc tgcctccgga
180
gctgctggtg cagggtgctga gccacgtgcc ggccacgctc cttggacacg cgatgcccgc
240
cagtgtgccc cgcctggcgc gacatagtgg acgggcccac tgggaggctg ctgcaactgg
300
cccgcgaccg cagcgcggag ggccgagcac tctacgcagt ggctcaacgc tgctgccc
360
acaacgaaga caaagaggag ttcccgctgt gcgccctggc gcgctactga ctgcgcgcgc
420
ccttcggccg caatctcatc ttcaactcct gcggagagca gggcttcaga ggctgggagg
480
tggagcatgg cgggaacggc tgggcatag aaaagaacct aacaccggtg cctggggctc
540
cttcgcagac ctgcttcgtg acctctttcg aatggtgctc caagaggcag cttgtggacc
600
tggtgatgga aggggtgtgg caggagctgc tggacagcgc ccagattgag atctgtgtgg
660
ctgactggtg gggcgctcga gagaactgcg gctgcgtcta ccagctccg gtccgccttc
720
tggtgtgta tgaaaaggaa gtggtcaagt tctcagctc acctgaccg gtccttcagt
780
ggactgagag gggctgccga caggctctcc acgtcttcac caactttggc aagggcaccc
840
gtactgtatc ttttgagcag tacgggagag acgtgagttc ctgggtgggg cactatggcg
900
cccttgtgac ccaactccagt gtgaggggtc ggatccgtct gtcctagcga ctggactact
960
gcctgacgtt gtcagtcaag accagccttg cagccagggt cagtggctca cacctgtggg
1020
atcctccac tttggccttc caaaatgttg cgattatagg cgtgagccac tgtggctggc
1080
ctgaaatctt ctagtatcca cattcataaa gtaaaaagaa aataaaaagg catagaatgt
1140
caagctaacc aggcgtccgc tacttcagaa gagtgtactg tcgcatgggg agtctgtaac
1200
catgcttttc acttccactg catctctcgc tggctcaaaa cagcaggt gtgtccattg
1260
gacaacagag agtgggaatt ccaaaagtat gggcactagg aaaagacttc ttccatcaag
1320
cttaattgtt ttgttattca ttaaatgact ttccctgctg ttacctaatt acaaattgga
1380
tggaactgtg tttttttctg ctttgtttt tcagtttctg gtttctgtag ccatattgta
1440
ttctgtgtca aataaagtcc agttggattc tggaaaaaaa aa
1482

<210> 1542

<211> 57

<212> PRT

<213> Homo sapiens

<400> 1542

Lys Gly Ile Glu Cys Gln Ala Asn Gln Ala Ser Ala Thr Ser Glu Glu
 1 5 10 15
 Cys Thr Val Ala Trp Gly Val Cys Asn His Ala Phe His Phe His Cys
 20 25 30
 Ile Ser Arg Trp Leu Lys Thr Arg Gln Val Cys Pro Leu Asp Asn Arg
 35 40 45
 Glu Trp Glu Phe Gln Lys Tyr Gly His
 50 55

<210> 1543

<211> 311

<212> DNA

<213> Homo sapiens

<400> 1543

gctagcgatg ctactttaag gtatgcgaag ttggatgctg acgttgccctc ctatcggttg
 60
 gagtcaaacy gacgaacaag cgttcgaggt agctttaaat gcgggagcag ccagaaagtt
 120
 accaaagtcg gtgccgcgcc ttatgtttct cgaatggctc acgcgccgag gctacttgct
 180
 ccacggctcg agccgagccg acctcgtttg ttttgaacct cgagcaccca aagacttcag
 240
 ccctgacgag ttcagcaaac gcaccgccgt tttcgctctc tcagatgggg tgtggcccc
 300
 cncnccnc c
 311

<210> 1544

<211> 96

<212> PRT

<213> Homo sapiens

<400> 1544

Met Arg Ser Trp Met Leu Thr Leu Pro Pro Ile Gly Trp Ser Gln Thr
 1 5 10 15
 Asp Glu Gln Ala Phe Glu Val Ala Leu Asn Ala Gly Asp Ala Arg Lys
 20 25 30
 Leu Pro Lys Ser Val Pro Arg Leu Met Phe Leu Glu Trp Leu Thr Arg
 35 40 45
 Arg Gly Tyr Leu Leu His Gly Ser Ser Arg Ala Asp Leu Val Cys Phe
 50 55 60
 Glu Pro Arg Ala Pro Lys Asp Phe Ser Pro Asp Glu Phe Ser Lys Arg
 65 70 75 80
 Thr Ala Val Phe Ala Ser Ser Asp Gly Val Trp Pro Pro Xaa Xaa Xaa
 85 90 95

<210> 1545

<211> 362

<212> DNA

<213> Homo sapiens

<400> 1545
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 caacagtagt tggcgaatcc ttcgatggtc aagtcctgtg agcttgctca tctgacggat
 120
 cgtctctgtc tcaagcacct cgctgtttc caggttcaag gcctggatag tgcgagtgtc
 180
 gtactggtcg atcacttcca ccgagtggtc tgggtagccc cttgccattc gctttatgat
 240
 ctcaaccata gatgcatttg gcattgtcca gagcttgtag tccttaacga tctctctggc
 300
 gtcgtagaaa accttcacgc tatcgtcagg atgggtcact gtggtgatgt accgtccaga
 360
 ac
 362

<210> 1546
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 1546
 Met Val Lys Ser Cys Glu Leu Ala His Leu Thr Asp Arg Leu Cys Leu
 1 5 10 15
 Lys His Leu Ala Cys Phe Gln Val Gln Gly Leu Asp Ser Ala Ser Val
 20 25 30
 Val Leu Val Asp His Phe His Arg Val Val Trp Val Ala Pro Cys His
 35 40 45
 Ser Leu Tyr Asp Leu Asn His Arg Cys Ile Trp His Val Pro Glu Leu
 50 55 60
 Val Leu Leu Asn Asp Leu Ser Gly Val Val Glu Asn Leu His Ala Ile
 65 70 75 80
 Val Arg Met Gly His Cys Gly Asp Val Pro Ser Arg
 85 90

<210> 1547
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 1547
 cgcgttgcca caccggaaga cccggccagc tcacgcctgg gtgaaagttt ctgggcgttc
 60
 ctgcccggtt cgggtgtggt cagcgccgtg tcggcgtgga acctggagcg cgagcgctg
 120
 cgcaaaactcg gcctgccggc ctggcactgg aagaacgccg tgctcagtgc ctggatgtac
 180
 agcgtggtgt tgtggggggt gatgattgtc tgggtgggcg cggcggtgat tccgttctctg
 240
 atcattcagg gtgtctacgg gttctcgttg ctggaagtgg tcaactacgt cgagcactac
 300
 gggcttaaac gccagaagtt gcccaacggt cgttatgaac ggtgttcgcc tcggcactcg
 360

tggaacagca accggattgt caccaatatc tttctgttcc aacttcagcg gcattccgac
 420
 caccatgcc
 429

<210> 1548
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 1548
 Arg Val Ala Thr Pro Glu Asp Pro Ala Ser Ser Arg Leu Gly Glu Ser
 1 5 10 15
 Phe Trp Ala Phe Leu Pro Arg Ser Val Trp Phe Ser Ala Val Ser Ala
 20 25 30
 Trp Asn Leu Glu Arg Glu Arg Leu Arg Lys Leu Gly Leu Pro Ala Trp
 35 40 45
 His Trp Lys Asn Ala Val Leu Ser Ala Trp Met Tyr Ser Val Val Leu
 50 55 60
 Trp Gly Val Met Ile Val Trp Leu Gly Ala Ala Val Ile Pro Phe Leu
 65 70 75 80
 Ile Ile Gln Gly Val Tyr Gly Phe Ser Leu Leu Glu Val Val Asn Tyr
 85 90 95
 Val Glu His Tyr Gly Leu Lys Arg Gln Lys Leu Pro Asn Gly Arg Tyr
 100 105 110
 Glu Arg Cys Ser Pro Arg His Ser Trp Asn Ser Asn Arg Ile Val Thr
 115 120 125
 Asn Ile Phe Leu Phe Gln Leu Arg His Ser Asp His His Ala
 130 135 140

<210> 1549
 <211> 443
 <212> DNA
 <213> Homo sapiens

<400> 1549
 gtcgacaggc tccagggttc tgttttgtag tgcacccgct gtggtgcaac atgcgtctgg
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 gcacaccagc gtcgcccgtt tctgttgta gtctttcttc tctgactcca ggggtattgg
 120
 gtctttctgc cagcgcccat gcaactttgg cagcctggcc tgtctgctgg taagtggggc
 180
 agaatccctg cactccacca ttcttgggca aactccctc taggattttg gtctcccttt
 240
 tctctctggt ctttgaccac cgctaccag caaactcctc catctagacc agccagcatt
 300
 ggtttcttcc actccccag ctgccgcgtg ggaggcgcca ctgcaaactt ccctggggtc
 360
 tccagctgc tcagagatcc ccatgccctt ccctgatcag ctccctgccc ggttctcatt
 420
 ccgacgcggc tgcattggata ttc
 443

<210> 1550

<211> 139
 <212> PRT
 <213> Homo sapiens

<400> 1550
 Met Arg Thr Gly Gln Gly Ala Asp Gln Gly Arg Ala Trp Gly Ser Leu
 1 5 10 15
 Ser Ser Trp Glu Thr Pro Gly Lys Phe Ala Val Ala Pro Pro Thr Arg
 20 25 30
 Gln Leu Gly Glu Trp Lys Lys Pro Met Leu Ala Gly Leu Asp Gly Gly
 35 40 45
 Val Cys Trp Val Ala Val Val Lys Asp Gln Arg Glu Lys Gly Asp Gln
 50 55 60
 Asn Pro Arg Gly Ser Val Ala Gln Glu Trp Trp Ser Ala Gly Ile Leu
 65 70 75 80
 Pro His Leu Pro Ala Asp Arg Pro Gly Cys Gln Ser Cys Met Gly Ala
 85 90 95
 Gly Arg Lys Thr Gln Tyr Pro Trp Ser Gln Arg Gly Lys Thr Thr Thr
 100 105 110
 Gly Asn Gly Arg Arg Trp Cys Ala Gln Thr His Val Ala Pro Gln Arg
 115 120 125
 Val His Tyr Lys Thr Glu Pro Trp Ser Leu Ser
 130 135

<210> 1551
 <211> 306
 <212> DNA
 <213> Homo sapiens

<400> 1551
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 agaggagcag ccagctggcc aagcaccctt gcccttgccc tgcgggctcc acaaaagctg
 120
 gaggagcaaa cgcagctcac ctctttttct gtccactgct tcagggccta cccctgtgct
 180
 ttggagatgg aacaaaagtg agagagctcc ctgacacacc ctcccagggc gaggatggca
 240
 gtccttctt ccatttggtc ctaacacagc ctcccagga gaccaggggc atcccnnnnc
 300
 cccnnc
 306

<210> 1552
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 1552
 Met Asp Thr Pro Pro Leu Ala Leu Asn Met Thr Trp Leu Pro His Thr
 1 5 10 15
 Arg Lys Pro Gln Arg Ser Ser Gln Leu Ala Lys His Pro Cys Pro Cys
 20 25 30
 Pro Ala Gly Ser Thr Lys Ala Gly Gly Ala Asn Ala Ala His Leu Phe

```

          35          40          45
Phe Cys Pro Leu Leu Gln Gly Leu Pro Leu Cys Phe Gly Asp Gly Thr
    50          55          60
Lys Val Arg Glu Leu Pro Asp Thr Pro Ser Gln Gly Glu Asp Gly Ser
65          70          75          80
Ser Phe Leu His Leu Val Leu Thr Gln Pro Pro Gln Glu Thr Arg Gly
          85          90          95
Ile Pro Xaa Pro Xaa
          100

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<210> 1553

<211> 657

<212> DNA

<213> Homo sapiens

<400> 1553

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atcctgcaga atgatggcgt ggtcaccagc ccctattccc ggccacgcaa ggccggccac
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acgctactca tcctgggggg ccagaccttc atgtgtgaca agatctacca ggtggaccac
120
aaggccaagg agatcatccc caaggccgac ctgccagacc cccggaagga gtccagcgcc
180
tcagcgatcg gctgcaaggt ctatgtgacg gggggcaggg gctccgagaa cggggtctcc
240
aaggatgtct ggggtgtacga caccgtacat gaggaatggt ccaaggcggc gcccattgctg
300
attgcccgtt ttggccatgg ctcagctgag ctggagaact gcctctatgt ggtgggggga
360
cacacatccc tggcaggggt cttcccggcc tcgccttctg tctccctgaa acaagtggag
420
aaatacgacc ctggggccaa caagtggatg atggtggccc ccttgcggga tggcgtcagc
480
aatgcccagc tgggtgagtgc caagctgaag ctctttgttt ttggaggaac cagcatccac
540
cgggacatgg tgtccaaggt ccagtgtat gacccctcgg agaacagggt gacgatcaag
600
gccgagtgcc ccagccttg gcggtacaca gccgctgccg tcctgggcag ccagatc
657

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<210> 1554

<211> 219

<212> PRT

<213> Homo sapiens

<400> 1554

```

Ile Leu Gln Asn Asp Gly Val Val Thr Ser Pro Tyr Ser Arg Pro Arg
 1          5          10          15
Lys Ala Gly His Thr Leu Leu Ile Leu Gly Gly Gln Thr Phe Met Cys
          20          25          30
Asp Lys Ile Tyr Gln Val Asp His Lys Ala Lys Glu Ile Ile Pro Lys
          35          40          45
Ala Asp Leu Pro Ser Pro Arg Lys Glu Phe Ser Ala Ser Ala Ile Gly
          50          55          60
Cys Lys Val Tyr Val Thr Gly Gly Arg Gly Ser Glu Asn Gly Val Ser

```



```

65          70          75          80
Lys Asp Val Trp Val Tyr Asp Thr Val His Glu Glu Trp Ser Lys Ala
          85          90          95
Ala Pro Met Leu Ile Ala Arg Phe Gly His Gly Ser Ala Glu Leu Glu
          100          105          110
Asn Cys Leu Tyr Val Val Gly Gly His Thr Ser Leu Ala Gly Val Phe
          115          120          125
Pro Ala Ser Pro Ser Val Ser Leu Lys Gln Val Glu Lys Tyr Asp Pro
          130          135          140
Gly Ala Asn Lys Trp Met Met Val Ala Pro Leu Arg Asp Gly Val Ser
145          150          155          160
Asn Ala Ala Val Val Ser Ala Lys Leu Lys Leu Phe Val Phe Gly Gly
          165          170          175
Thr Ser Ile His Arg Asp Met Val Ser Lys Val Gln Cys Tyr Asp Pro
          180          185          190
Ser Glu Asn Arg Trp Thr Ile Lys Ala Glu Cys Pro Gln Pro Trp Arg
          195          200          205
Tyr Thr Ala Ala Ala Val Leu Gly Ser Gln Ile
          210          215

```

<210> 1555

<211> 328

<212> DNA

<213> Homo sapiens

<400> 1555

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acgcgtggga gctcgggaga gaggactctg cttctggggg ttgaagggtga gcgtgattct
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ggaggagcct gccttcgggc gacgctgtgt tgtggagagg atgcaggaca tgagtgatcc
120
tgtaagggtg atcgagtgtg cctcgtgaag tctggaagtc agcgagtgtg ggccgtggag
180
gtgagccacc ggtttgtgat ttgaaactga gtgagagtgc tgtggagcgc gaaatatgtg
240
tgtgtgtaga gtggagggtga gcgaatttgt gtgcatgtga gacggacgca atggcagagt
300
gtagcatcct gtgttgggat tgggattn
328

```

<210> 1556

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1556

```

Met Leu His Ser Ala Ile Ala Ser Val Ser His Ala His Lys Phe Ala
1          5          10          15
His Leu His Ser Thr His Thr His Ile Ser Arg Ser Thr Ala Leu Ser
          20          25          30
Leu Ser Phe Lys Ser Gln Thr Gly Gly Ser Pro Pro Arg Pro Thr Leu
          35          40          45
Ala Asp Phe Gln Thr Ser Arg Gly Thr Leu Asp His Pro Tyr Arg Ile
          50          55          60
Thr His Val Leu His Pro Leu His Asn Thr Arg Ser Pro Gln Gly Arg

```

```
<210> 1559
<211> 556
<212> DNA
<213> Homo sapiens
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<400> 1559

accggtggcg acggtatcgg tggcgcgctcg atccttgccct cggaatcctt cgctgcagag
 60
 ggtgagtcga agcgacccag cgtccagggtg ggcgacccgt tcatggagaa gctgctcatc
 120
 gagtgcaccc ttgacctctt caacgccggg gtagttgagg ccttgacagga ttccggtgcc
 180
 gccggaatct cctgtgccac ctccgagctg gccagtgtg ggcacggtgg catgcacgtc
 240
 gagctcgacc gcgttccgct gcgcgacccg aacctcgccc ctgaagagat cctcatgagc
 300
 gagtccagg agcggatggc cgcggtggtg cgccccgac agcttgaccg cttcatggag
 360
 atctgcgccc attgggggtgt cgctgccact gtcattggcg aggtcaccga caccggtcga
 420
 cttcacattg attggcaggg cgagcggatt gtcgacgtcg atccgcggac ggttgctcac
 480
 gacggaccgg ttctcgacat gccggccgcc cgtccgtggt ggattgatga gctcaacgag
 540
 aacgacgcta acgcgt
 556

<210> 1560

<211> 185

<212> PRT

<213> Homo sapiens

<400> 1560

Thr	Gly	Gly	Asp	Gly	Ile	Gly	Gly	Ala	Ser	Ile	Leu	Ala	Ser	Glu	Ser	1	5	10	15
Phe	Ala	Ala	Glu	Gly	Glu	Ser	Lys	Arg	Pro	Ser	Val	Gln	Val	Gly	Asp	20	25	30	
Pro	Phe	Met	Glu	Lys	Leu	Leu	Ile	Glu	Cys	Thr	Leu	Asp	Leu	Phe	Asn	35	40	45	
Ala	Gly	Val	Val	Glu	Ala	Leu	Gln	Asp	Phe	Gly	Ala	Ala	Gly	Ile	Ser	50	55	60	
Cys	Ala	Thr	Ser	Glu	Leu	Ala	Ser	Ala	Gly	Asp	Gly	Gly	Met	His	Val	65	70	75	80
Glu	Leu	Asp	Arg	Val	Pro	Leu	Arg	Asp	Pro	Asn	Leu	Ala	Pro	Glu	Glu	85	90	95	
Ile	Leu	Met	Ser	Glu	Ser	Gln	Glu	Arg	Met	Ala	Ala	Val	Val	Arg	Pro	100	105	110	
Asp	Gln	Leu	Asp	Arg	Phe	Met	Glu	Ile	Cys	Ala	His	Trp	Gly	Val	Ala	115	120	125	
Ala	Thr	Val	Ile	Gly	Glu	Val	Thr	Asp	Thr	Gly	Arg	Leu	His	Ile	Asp	130	135	140	
Trp	Gln	Gly	Glu	Arg	Ile	Val	Asp	Val	Asp	Pro	Arg	Thr	Val	Ala	His	145	150	155	160
Asp	Gly	Pro	Val	Leu	Asp	Met	Pro	Ala	Ala	Arg	Pro	Trp	Trp	Ile	Asp	165	170	175	
Glu	Leu	Asn	Glu	Asn	Asp	Ala	Asn	Ala								180	185		

<210> 1561
 <211> 466
 <212> DNA
 <213> Homo sapiens

<400> 1561
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 ccaagatgaa gacagcattc agaattgatg tgatttcctt gaatgtggct taggaaatgt
 120
 ggacacttaa aactctcact tgaaattggg cacaggtttg atgtagagat aaggacgggg
 180
 tgcggaatgg agaccatttt tgtcattgat tcatctgacc gataaggcca tagtgcagtt
 240
 aggtgatatt cgaaagcttc tttgatgctc tttatgtata tgttgaagg aactaccagg
 300
 cgttgcttta aattcccaat gtgttgcttc gttactacta atttaatacc gtaagctcta
 360
 ggtaaagttc catgttggtg aactctgact gttctctttg gaattgaacg ttttgcattc
 420
 tctctctgtg gctttaggtc tgacattgta tttgaccttt actagt
 466

<210> 1562
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 1562
 Met Ser Asp Leu Lys Pro Gln Glu Glu Asp Ala Lys Arg Ser Ile Pro
 1 5 10 15
 Lys Arg Thr Val Arg Val Gln Gln His Gly Thr Leu Pro Arg Ala Tyr
 20 25 30
 Gly Ile Lys Leu Val Val Thr Lys Gln His Ile Gly Asn Leu Lys Gln
 35 40 45
 Arg Leu Val Val Pro Ser Asn Ile Tyr Ile Lys Ser Ile Lys Glu Ala
 50 55 60
 Phe Glu Tyr His Leu Thr Ala Leu Trp Pro Tyr Arg Ser Asp Glu Ser
 65 70 75 80
 Met Thr Lys Trp Val Ser Ile Pro His Pro Val Leu Ile Ser Thr Ser
 85 90 95
 Asn Leu Cys Pro Ile Ser Ser Glu Ser Phe Lys Cys Pro His Phe Leu
 100 105 110
 Ser His Ile Gln Gly Asn His Ile Asn Ser Glu Cys Cys Leu His Leu
 115 120 125
 Gly Met
 130

<210> 1563
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 1563

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120
ttgcgtgacc accgtggcgc catcgtgctg tcgatgctgt tgacgtgggt gctgtcggcg
180
ggtgtgggtg tggtcacct gatgaccccg accgtgctgc aaaccgtcta ccacttcagc
240
ccgacgggtg cgctgcaagc caacagcctg gcgatcgta cgctgagcct gggctgcatt
300
gcgtccggcg cgctggctga ccgttttggg gccggtcgcg ttttggtcac cggttggcgt
360
tgctgctggc cacttcctgg acgctgtatc acagcctgat ggcccagacg gaatggtga
420
ataagtgtac gcgt
434

<210> 1564

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1564

Leu	Gly	Gly	Val	Phe	Gly	Leu	Leu	Ser	Val	Tyr	Leu	Pro	Arg	Trp	Leu
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His	Glu	Thr	Pro	Ile	Phe	Ala	Glu	Met	Gln	Gln	Arg	Lys	Thr	Leu	Ala
			20					25					30		
Ala	Glu	Leu	Pro	Leu	Arg	Ala	Val	Leu	Arg	Asp	His	Arg	Gly	Ala	Ile
			35				40					45			
Val	Leu	Ser	Met	Leu	Leu	Thr	Trp	Leu	Leu	Ser	Ala	Gly	Val	Val	Val
			50			55					60				
Val	Ile	Leu	Met	Thr	Pro	Thr	Val	Leu	Gln	Thr	Val	Tyr	His	Phe	Ser
65				70					75					80	
Pro	Thr	Val	Ala	Leu	Gln	Ala	Asn	Ser	Leu	Ala	Ile	Val	Thr	Leu	Ser
				85				90					95		
Leu	Gly	Cys	Ile	Ala	Ser	Gly	Ala	Leu	Ala	Asp	Arg	Phe	Gly	Ala	Gly
			100					105					110		
Arg	Val	Leu	Val	Thr	Gly	Trp	Arg	Cys	Cys	Trp	Pro	Leu	Pro	Gly	Arg
			115				120					125			
Cys	Ile	Thr	Ala												
			130												

<210> 1565

<211> 373

<212> DNA

<213> Homo sapiens

<400> 1565

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120
ctgcattcgg ccatttcttc ccaagaatca ccataaaggt tgtcaaaatc aaggaccctg
180

atccggtgat tctcgaagtc atcgatgagc agaacaagtt tccccccgag ggagaaaagc
 240
 ggggtggtgct cttgatgctc gacaacctct accgtcccag taccaccgt gcattggcga
 300
 acggggggcgt cccttatctg cggtcgaaga gtgtcactgt tgacctcgta gacagccggg
 360
 acaacacggg tac
 373

<210> 1566
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1566
 Met Ser Gln Arg Val Ser Gly Ser Gly Thr Tyr Trp Thr Met Lys Ala
 1 5 10 15
 Ile Lys Arg Thr Arg Glu Pro Ala Phe Gly His Phe Phe Pro Arg Ile
 20 25 30
 Thr Ile Lys Val Val Lys Ile Lys Asp Pro Asp Pro Val Ile Leu Glu
 35 40 45
 Val Ile Asp Glu Gln Asn Lys Phe Thr Pro Glu Gly Glu Lys Arg Val
 50 55 60
 Val Leu Leu Met Leu Asp Asn Leu Tyr Arg Pro Ser Thr His Arg Ala
 65 70 75 80
 Leu Ala Asn Gly Gly Val Pro Tyr Leu Arg Ser Lys Ser Val Thr Val
 85 90 95
 Asp Leu Val Asp Ser Arg Asp Asn Thr Gly
 100 105

<210> 1567
 <211> 917
 <212> DNA
 <213> Homo sapiens

<400> 1567
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 aagccgctgc actcctgggg gaccagttt gatgcctcca ggaggataag tctgaagccg
 120
 ggttgggaag ggagcggaga ggcccaaaca gacagcagg cagcgccctc tgctggcacc
 180
 ctggagacag cttcggtgc gggggccctg ctttctagtc ctcccagct ttcaggacac
 240
 cttgacaacc tggggtccct gcagaagtgg cccggctgtc ccccaagtct cctgaagcta
 300
 tctgggtagg gtgggaggca gtgctgtgag ccacaaatgc aaagcagagg ggacagatgt
 360
 tgggactcaa agacatgagg tagagctggc cccatgggta ggtgccacca ccagagccca
 420
 tgaggcttcg tgttctagaa ggtgggtggg tagtgccgca ctgagggcgt gtccgggagg
 480
 gagcatgtgt caccagggct caggaaacag catgagtcac gacgcggggg tgtttaaggc
 540

attcgtgccca cagcgggggac ctccggagcta tgccttgata aggcaagtga ggttacatgt
 600
 acgatgatgc ggtttgtgct gcagactgga aaaaagcagg ggctttgtcc tctcctgacc
 660
 ccctcacact ctgccttcac ggtaggctcc tgagaggggg gtctccaagg aggggtgtcag
 720
 tactgcagct tcagctggcg tggatggggg gcttacagga gcagcagggc tgaggagat
 780
 gacagcagta cgaatcgtgg ctctcctgag gcctgggttt cctcatatgt aaaatggggg
 840
 ttgcattaga ccataccctt ggctgtgttt taggcaaata gggatgaaag tggggccaag
 900
 ggctgaagag ctgggtc
 917

<210> 1568
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1568
 Met Gly Pro Ala Leu Pro His Val Phe Glu Ser Gln His Leu Ser Pro
 1 5 10 15
 Leu Leu Cys Ile Cys Gly Ser Gln His Cys Leu Pro Pro Tyr Pro Asp
 20 25 30
 Ser Phe Arg Arg Leu Gly Gly Gln Pro Gly His Phe Cys Arg Asp Pro
 35 40 45
 Arg Leu Ser Arg Cys Pro Glu Ser Trp Gly Gly Leu Glu Gly Arg Gly
 50 55 60
 Pro Ala Ala Glu Ala Val Ser Arg Val Pro Ala Glu Gly Ala Ala Cys
 65 70 75 80
 Cys Ser Val Trp Ala Ser Pro Leu Pro Ser Gln Pro Gly Phe Arg Leu
 85 90 95
 Ile Leu Leu Glu Ala Ser Asn Trp Val Pro Gln Glu Cys Ser Gly Phe
 100 105 110
 Pro

<210> 1569
 <211> 379
 <212> DNA
 <213> Homo sapiens

<400> 1569
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 120
 gtggccagca cggaattgct gaaggatggg aagagggaga ccaccgtgag ccaactgctt
 180
 attaaccoca cggacctgga cataggcggt gtcttcactt gccgaagcat gaacgaagcc
 240
 atccctagtg gcaaggagac ttccatcgag ctggatgtgc accaccctcc tacagtgacc
 300

ctgtccattg agccacagac ggtgcaggag ggtgagcgtg ttgtctttac ctgccaggcc
 360
 acagccaacc cggagatct
 379

<210> 1570
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 1570
 Gly Gly Pro Val Ile Leu Leu Gln Ala Gly Thr Pro His Asn Leu Thr
 1 5 10 15
 Cys Arg Ala Phe Asn Ala Lys Pro Ala Ala Thr Ile Ile Trp Phe Arg
 20 25 30
 Asp Gly Thr Gln Gln Glu Gly Ala Val Ala Ser Thr Glu Leu Leu Lys
 35 40 45
 Asp Gly Lys Arg Glu Thr Thr Val Ser Gln Leu Leu Ile Asn Pro Thr
 50 55 60
 Asp Leu Asp Ile Gly Arg Val Phe Thr Cys Arg Ser Met Asn Glu Ala
 65 70 75 80
 Ile Pro Ser Gly Lys Glu Thr Ser Ile Glu Leu Asp Val His His Pro
 85 90 95
 Pro Thr Val Thr Leu Ser Ile Glu Pro Gln Thr Val Gln Glu Gly Glu
 100 105 110
 Arg Val Val Phe Thr Cys Gln Ala Thr Ala Asn Pro Glu Ile
 115 120 125

<210> 1571
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 1571
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 120
 gatgcgttcg gcatgtcgac cgaatgggtc ggattggaca acttcgcaa cctgctggat
 180
 gacccacact acctgaattc cttccagcgc accgccgtgt tctcggtgct ggtggcaggg
 240
 gtcgggatcg ccgtgtcact gggctctggcg atctttgccg accccatcac tccgtcgcca
 300
 tgtgtacaag acacactgct gatcgtgccc tacgcggtgg caccatgat cgccggc
 357

<210> 1572
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1572
 Cys Ala Leu Phe Arg Ser Arg Trp Val Pro Trp Xaa Leu Ile Met Pro


```

      1           5           10           15
Gln Met Phe Ile Ile Gly Ile Phe Phe Phe Leu Pro Ser Gly Gln Ala
      20           25           30
Val Leu Gln Ser Phe Gln Met Glu Asp Ala Phe Gly Met Ser Thr Glu
      35           40           45
Trp Val Gly Leu Asp Asn Phe Arg Asn Leu Leu Asp Asp Pro Thr Tyr
      50           55           60
Leu Asn Ser Phe Gln Arg Thr Ala Val Phe Ser Val Leu Val Ala Gly
      65           70           75           80
Val Gly Ile Ala Val Ser Leu Gly Leu Ala Ile Phe Ala Asp Pro Ile
      85           90           95
Thr Pro Ser Pro Cys Val Gln Asp Thr Leu Leu Ile Val Pro Tyr Ala
      100          105          110
Val Ala Pro Met Ile Ala Gly
      115

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<210> 1573

<211> 337

<212> DNA

<213> Homo sapiens

<400> 1573

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gaattcccat tgatcatctga ttccatgtct ggaaagaggg aagagagaca tcatgcagaa
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tattgtacag attttggaaat cggtagagtt gaaatgggaa ctttttcaga gctggacaga
120
cttttcaagg ctccatcttt ctaataaact ggccattttt ggaattgggtt ataacacccg
180
ttggaaagag gatatccgtt accattatgc tgagatcagc tcccaggtgc cccttgga
240
gcgacttcgg gagtacttca actctgagaa gcctgaagga cggatcatta tgacccgagt
300
gcagaaaatg aactggaaaa atgtttacta caaat
337

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<210> 1574

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1574

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Met Gln Asn Ile Val Gln Ile Leu Glu Ser Val Gln Leu Lys Trp Glu
      1           5           10           15
Leu Phe Gln Ser Trp Thr Asp Phe Ser Arg Leu His Leu Ser Asn Lys
      20           25           30
Leu Ala Ile Phe Gly Ile Gly Tyr Asn Thr Arg Trp Lys Glu Asp Ile
      35           40           45
Arg Tyr His Tyr Ala Glu Ile Ser Ser Gln Val Pro Leu Gly Lys Arg
      50           55           60
Leu Arg Glu Tyr Phe Asn Ser Glu Lys Pro Glu Gly Arg Ile Ile Met
      65           70           75           80
Thr Arg Val Gln Lys Met Asn Trp Lys Asn Val Tyr Tyr Lys Phe
      85           90           95

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<210> 1575
 <211> 471
 <212> DNA
 <213> Homo sapiens

<400> 1575
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 120
 gaccaggccc gtgcgattct gggcgacgat ctactcatcg gcttgtccgc tcagactccc
 180
 gcccatgtgg aggcgcgcct gtcccagggg cgtgacatcg tcgactatct gggagttggg
 240
 gccctgcatg gtactggaac caaacctgag gctggggagc tcggcctggc tgagattcgt
 300
 gatgtcgtca acgccagccc gtggccgggtg tgcgtcatcg gtggggtgag cgcacccgat
 360
 gctcaagacg tagcccggtt gggatgtgac ggcctgagcg tcgtctcggc gatttgccgg
 420
 agtaccgacc ccaagtccag tgcacgggaa cttgcggagg cgtggcgtag g
 471

<210> 1576
 <211> 157
 <212> PRT
 <213> Homo sapiens

<400> 1576
 Xaa Arg Val Arg Glu Ile Cys Val Ser Gly Gly Val Pro Leu Ile Ile
 1 5 10 15
 Asp Asp Arg Val His Leu Val Ala Glu Ile Gly Ala Asp Gly Val His
 20 25 30
 Val Gly Gln Ser Asp Met Pro Val Asp Gln Ala Arg Ala Ile Leu Gly
 35 40 45
 Asp Asp Leu Leu Ile Gly Leu Ser Ala Gln Thr Pro Ala His Val Glu
 50 55 60
 Ala Ala Leu Ser Gln Gly Arg Asp Ile Val Asp Tyr Leu Gly Val Gly
 65 70 75 80
 Ala Leu His Gly Thr Gly Thr Lys Pro Glu Ala Gly Glu Leu Gly Leu
 85 90 95
 Ala Glu Ile Arg Asp Val Val Asn Ala Ser Pro Trp Pro Val Cys Val
 100 105 110
 Ile Gly Gly Val Ser Ala Ser Asp Ala Gln Asp Val Ala Arg Val Gly
 115 120 125
 Cys Asp Gly Leu Ser Val Val Ser Ala Ile Cys Arg Ser Thr Asp Pro
 130 135 140
 Lys Ser Ser Ala Arg Glu Leu Ala Glu Ala Trp Arg Thr
 145 150 155

<210> 1577
 <211> 287
 <212> DNA
 <213> Homo sapiens

<400> 1577

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 120
 ttgcgcgttg ccggggcagg cttccccgct cgcggccagc gcgccgccgg cgatctggtg
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 287

<210> 1578

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1578

Leu	Val	Leu	Gln	Arg	Pro	Ile	Ser	Ala	Leu	Arg	Met	Leu	Ile	Gly	Gly
1				5					10					15	
Pro	Leu	Arg	Ile	Pro	His	Pro	Ala	Gly	Leu	Arg	Thr	Val	Ala	Leu	Glu
			20					25					30		
Pro	Gly	Val	Ala	His	Ala	Arg	Thr	Leu	Arg	Val	Ala	Gly	Ala	Gly	Phe
		35					40				45				
Pro	Ala	Arg	Gly	Gln	Arg	Ala	Ala	Gly	Asp	Leu	Val	Ile	Glu	Leu	Glu
	50					55				60					
Pro	Met	Leu	Pro	Gln	Ala	Pro	Asp	Lys	Gln	Leu	His	Ala	Leu	Ile	Glu
65				70					75					80	
Gln	Leu	Asp	Val	Ala	Leu	Gly	Lys	Ser	Ala	Thr	Arg	His	Phe	Pro	
			85						90					95	

<210> 1579

<211> 2829

<212> DNA

<213> Homo sapiens

<400> 1579

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 120
 ggggcgggcy ggagcccccg cagtccgggg tcgccggcga gggccatgtc gctgttgggg
 180
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 240
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 300
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 360
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 480

ttgagtgatt tectgcaggc tatggaacac actgaagttc ttcagcttct cagcccccca
540
ggaataaaga ttactgtaaa cccagagtca aaggcagtct tggctggaca gtttgtgaaa
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660
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720
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780
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1020
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1080
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2100

gcaaataaag gcacacctga agaaactggc agctacttgg tatcaaagga tcttcccaag
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 2400
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 2580
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 2700
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<210> 1580

<211> 824

<212> PRT

<213> Homo sapiens

<400> 1580

Met	Ser	Leu	Leu	Gly	Asp	Pro	Leu	Gln	Ala	Leu	Pro	Pro	Ser	Ala	Ala
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Pro	Thr	Gly	Pro	Leu	Leu	Ala	Pro	Pro	Ala	Gly	Ala	Thr	Leu	Asn	Arg
			20					25					30		
Leu	Arg	Glu	Pro	Leu	Leu	Arg	Arg	Leu	Ser	Glu	Leu	Leu	Asp	Gln	Ala
			35				40					45			
Pro	Glu	Gly	Arg	Gly	Trp	Arg	Arg	Leu	Ala	Glu	Leu	Ala	Gly	Ser	Arg
	50					55					60				
Gly	Arg	Leu	Arg	Leu	Ser	Cys	Leu	Asp	Leu	Glu	Gln	Cys	Ser	Leu	Lys
65				70						75				80	
Val	Leu	Glu	Pro	Glu	Gly	Ser	Pro	Ser	Leu	Cys	Leu	Leu	Lys	Leu	Met
				85					90					95	
Gly	Glu	Lys	Gly	Cys	Thr	Val	Thr	Glu	Leu	Ser	Asp	Phe	Leu	Gln	Ala
			100					105					110		
Met	Glu	His	Thr	Glu	Val	Leu	Gln	Leu	Leu	Ser	Pro	Pro	Gly	Ile	Lys
		115				120						125			
Ile	Thr	Val	Asn	Pro	Glu	Ser	Lys	Ala	Val	Leu	Ala	Gly	Gln	Phe	Val
	130					135					140				
Lys	Leu	Cys	Cys	Arg	Ala	Thr	Gly	His	Pro	Phe	Val	Gln	Tyr	Gln	Trp
145				150						155				160	
Phe	Lys	Met	Asn	Lys	Glu	Ile	Pro	Asn	Gly	Asn	Thr	Ser	Glu	Leu	Ile

1282

595 600 605
 Ser Asn Val Met Ile Ile Tyr Thr Ser Ile Val Tyr Lys Pro Pro Glu
 610 615 620
 Ile Ile Met Cys Asp Ala Tyr Val Thr Asp Phe Pro Leu Asp Leu Asp
 625 630 635 640
 Ile Asp Pro Lys Asp Ala Asn Lys Gly Thr Pro Glu Glu Thr Gly Ser
 645 650 655
 Tyr Leu Val Ser Lys Asp Leu Pro Lys His Cys Leu Tyr Thr Arg Leu
 660 665 670
 Ser Ser Leu Gln Lys Leu Lys Glu His Leu Val Phe Thr Val Cys Leu
 675 680 685
 Ser Tyr Gln Tyr Ser Gly Leu Glu Asp Thr Val Glu Asp Lys Gln Glu
 690 695 700
 Val Asn Val Gly Lys Pro Leu Ile Ala Lys Leu Asp Met His Arg Gly
 705 710 715 720
 Leu Gly Arg Lys Thr Cys Phe Gln Thr Cys Leu Met Ser Asn Gly Pro
 725 730 735
 Tyr Gln Ser Ser Ala Ala Thr Ser Gly Gly Ala Gly His Tyr His Ser
 740 745 750
 Leu Gln Asp Pro Phe His Gly Val Tyr His Ser His Pro Gly Asn Pro
 755 760 765
 Ser Asn Val Thr Pro Ala Asp Ser Cys His Cys Ser Arg Thr Pro Asp
 770 775 780
 Ala Phe Ile Ser Ser Phe Ala His His Ala Ser Cys His Phe Ser Arg
 785 790 795 800
 Ser Asn Val Pro Val Glu Thr Thr Asp Glu Ile Pro Phe Ser Phe Ser
 805 810 815
 Asp Arg Leu Arg Ile Ser Glu Lys
 820

<210> 1581

<211> 426

<212> DNA

<213> Homo sapiens

<400> 1581

gatccgcac ccccggttat tgacgaggtg accttcaccc gagaggcca tacctatcac
 60
 cgggtgcccc aggtggctga cgctggctc gattcgggct cgatgccctt cgcccagtgg
 120
 ggataccgc atgtgcccgg ttcgaaggag aagttcgagt ccactaccc ggggtgacttc
 180
 atctgtgagg ccatcgacca gaccgcggg tggttttaca ccatgatggc cgtcggaacc
 240
 ctggtgtttg acgagtctc gtaccgcaat gtgctgtgtc tgggccacat cttggccgag
 300
 gacggtcgca agatgagcaa gcaccttggc aacatcctgt tgcctatccc gtcctatgat
 360
 tcccacggtg ccgacgcgct gcgttggttc atggcgccg acggctcccc atggagtgca
 420
 cgacgc
 426

<210> 1582

<211> 142

<212> PRT

<213> Homo sapiens

<400> 1582

```

Asp Pro His Arg Pro Phe Ile Asp Glu Val Thr Phe Thr Arg Glu Gly
 1           5           10           15
His Thr Tyr His Arg Val Pro Glu Val Ala Asp Ala Trp Leu Asp Ser
      20           25           30
Gly Ser Met Pro Phe Ala Gln Trp Gly Tyr Pro His Val Pro Gly Ser
      35           40           45
Lys Glu Lys Phe Glu Ser His Tyr Pro Gly Asp Phe Ile Cys Glu Ala
 50           55           60
Ile Asp Gln Thr Arg Gly Trp Phe Tyr Thr Met Ala Val Gly Thr
 65           70           75           80
Leu Val Phe Asp Glu Ser Ser Tyr Arg Asn Val Leu Cys Leu Gly His
      85           90           95
Ile Leu Ala Glu Asp Gly Arg Lys Met Ser Lys His Leu Gly Asn Ile
      100           105           110
Leu Leu Pro Ile Pro Leu Met Asp Ser His Gly Ala Asp Ala Leu Arg
      115           120           125
Trp Phe Met Ala Ala Asp Gly Ser Pro Trp Ser Ala Arg Arg
      130           135           140

```

<210> 1583

<211> 450

<212> DNA

<213> Homo sapiens

<400> 1583

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nnacgcgtga aggggttatgg agatgggttca gggagtaagg aagggtttcag ggatgggttta
60
gggggttctg aggaaatggg gtcaatggat gaggcaggtt ataggaagga tttgggggct
120
cctaagggaa taggttcagg gagtaaggca ggtttcaggg atggtttagg gagttctggg
180
gaaatggggg caatggatga ggcagattat aggaaggatt tgggagctcc tgaggaaatg
240
ggttcaggca gttacacaga ttacaggaat ggtttaggca gttctggaaa aatcagttca
300
ggggatgagg cagggtataa gaatgtttta ggggggttctg ggaggaatcc attagggagc
360
gaggcaggtt ctaggggtag tttggaggat tctgggtaca tcttgtcatg gaatgaggca
420
ggttctagga aaggctttgg gggaactagt
450

```

<210> 1584

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1584

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Xaa Arg Val Lys Gly Tyr Gly Asp Gly Ser Gly Ser Lys Glu Gly Phe

```


1	5	10	15
Arg Asp Gly Leu Gly Gly Ser Glu Glu Met Gly Ser Met Asp Glu Ala			
	20	25	30
Gly Tyr Arg Lys Asp Leu Gly Ala Pro Lys Gly Ile Gly Ser Gly Ser			
	35	40	45
Lys Ala Gly Phe Arg Asp Gly Leu Gly Ser Ser Gly Glu Met Gly Ser			
	50	55	60
Met Asp Glu Ala Asp Tyr Arg Lys Asp Leu Gly Ala Pro Glu Glu Met			
65	70	75	80
Gly Ser Gly Ser Tyr Thr Asp Tyr Arg Asn Gly Leu Gly Ser Ser Gly			
	85	90	95
Lys Ile Ser Ser Gly Asp Glu Ala Gly Tyr Lys Asn Val Leu Gly Gly			
	100	105	110
Ser Gly Arg Asn Pro Leu Gly Ser Glu Ala Gly Ser Arg Gly Ser Leu			
	115	120	125
Glu Asp Ser Gly Tyr Ile Leu Ser Trp Asn Glu Ala Gly Ser Arg Gln			
	130	135	140
Gly Phe Gly Gly Thr Ser			
145	150		

<210> 1585

<211> 596

<212> DNA

<213> Homo sapiens

<400> 1585

tgatcatctg taattcttgt ccgtgggcgt ttgaactgag aatgtcttaa gaagttggga
60

tctaataccga gctgctgctg gcaaagttgg gtgaggtctg cagagagtgc gtccatctgt
120

ggcagctgca gggcaagctg gggaggaagc gcagggtggt gcacaggttg catcataatg
180

gaaggaaaga gcggcaggtc cagagaaacc ggcctctccc aaaaagttat caaactctgg
240

tttagaaata cgcttttttaa ggaacgacag agaaataaag attcaccata caacttcagt
300

aacctccta taacggtttt agaagatc agaattgatc cacagcccac ctctttagaa
360

cattacaaat ctgatgcatc attcagtaaa aggtcttcta gaacgagatt tactgactac
420

cagcttaggg ttctgcaaga cttttttgac acaaacgctt acccaaaaga tgatgaaata
480

gaacaactct ccactgttct caatctgcct acccgggtta ttgttgtatg gttccagaat
540

gctcgtcaga aagcacgaaa gagttatgag aatcaagcag aaacccttc acgcgt
596

<210> 1586

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1586

Met Glu Gly Lys Ser Gly Arg Ser Arg Glu Thr Gly Leu Ser Gln Lys

```

      1           5           10           15
Val Ile Lys His Trp Phe Arg Asn Thr Leu Phe Lys Glu Arg Gln Arg
      20           25           30
Asn Lys Asp Ser Pro Tyr Asn Phe Ser Asn Pro Pro Ile Thr Val Leu
      35           40           45
Glu Asp Ile Arg Ile Asp Pro Gln Pro Thr Ser Leu Glu His Tyr Lys
      50           55           60
Ser Asp Ala Ser Phe Ser Lys Arg Ser Ser Arg Thr Arg Phe Thr Asp
      65           70           75           80
Tyr Gln Leu Arg Val Leu Gln Asp Phe Phe Asp Thr Asn Ala Tyr Pro
      85           90           95
Lys Asp Asp Glu Ile Glu Gln Leu Ser Thr Val Leu Asn Leu Pro Thr
      100           105           110
Arg Val Ile Val Val Trp Phe Gln Asn Ala Arg Gln Lys Ala Arg Lys
      115           120           125
Ser Tyr Glu Asn Gln Ala Glu Thr Pro Ser Arg
      130           135

```

<210> 1587

<211> 501

<212> DNA

<213> Homo sapiens

<400> 1587

```

tgtacacaca gtgatttggg gtcctttttc ctaaaacagc ttctttatca ggactttgga
60
attctgggtg agatagaaac actgaaaaca gggcggaagt tttttcttct ggcttcttag
120
tccacggagg gctcagcgtg gagaggatat gccgtggcat tctccctggg agaccacaca
180
tggtcccgac agctcagacc ccagaccgca tgtgctcctg acagctcaga cccagaccg
240
cgcgtgctcc tgacagctca gacccagac cgcaggtgct cccgacagct cagacccag
300
accgcgggtg ctctgacag ctcagacccc agaccgcgcg tgctcccgac agctcagacc
360
ccagaccgcg ggtgctcctg acagctcaga cccagaccg cgcgtgctcc cgacagctca
420
gacccagac cgcgggtgct cctgacagct cagaccccag accgcgggtg ctctgacag
480
ctcagacccc agaccacgcg t
501

```

<210> 1588

<211> 86

<212> PRT

<213> Homo sapiens

<400> 1588

```

Ser Thr Glu Gly Ser Ala Trp Arg Gly Tyr Ala Val Ala Phe Ser Leu
      1           5           10           15
Gly Asp His Thr Cys Ser Arg Gln Leu Arg Pro Gln Thr Ala Cys Ala
      20           25           30
Pro Asp Ser Ser Asp Pro Arg Pro Arg Val Leu Leu Thr Ala Gln Thr

```

```

      35              40              45
Pro Asp Arg Arg Cys Ser Arg Gln Leu Arg Pro Gln Thr Ala Gly Ala
      50              55              60
Pro Asp Ser Ser Asp Pro Arg Pro Arg Val Leu Pro Thr Ala Gln Thr
65              70              75              80
Pro Asp Arg Gly Cys Ser
      85

```

<210> 1589

<211> 407

<212> DNA

<213> Homo sapiens

<400> 1589

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aagcttgctg gggacaccct ttttacgggg cctcgtgggg gaggagttac ctgcattgac
60
tccaccgggt ccactaacgc cgacatggct gctttcgtgc gagcaggggg aacgtctttc
120
tgcctactcg ttgctgacca ccaagagggc gggcgtggac gggtcacgcg cagttggcag
180
gatgtccccg gtacgagttt ggcgatctca gcgttggtgc ccaatgatcg tccgtcgag
240
gactggggct ggctgtcgat gggtgcgggg ctgctgttg tcaagggtcat caaggaggtc
300
gggtggggctg accgttcccc agtgacgctg aagtggccca atgatgtgct cgtggatctg
360
gacactgacc agggcggcaa agtgtgcgga attctctcag aacgcgt
407

```

<210> 1590

<211> 135

<212> PRT

<213> Homo sapiens

<400> 1590

```

Lys Leu Ala Gly Asp Thr Leu Phe Thr Gly Pro Arg Gly Gly Gly Val
 1              5              10              15
Thr Cys Ile Asp Ser Thr Gly Ser Thr Asn Ala Asp Met Ala Ala Phe
      20              25              30
Val Arg Ala Gly Gly Thr Ser Phe Cys Leu Leu Val Ala Asp His Gln
      35              40              45
Glu Gly Gly Arg Gly Arg Phe Thr Arg Ser Trp Gln Asp Val Pro Gly
      50              55              60
Thr Ser Leu Ala Ile Ser Ala Leu Val Pro Asn Asp Arg Pro Ser Gln
65              70              75              80
Asp Trp Gly Trp Leu Ser Met Val Ala Gly Leu Ala Val Val Lys Val
      85              90              95
Ile Lys Glu Val Gly Gly Ala Asp Arg Ser Arg Val Thr Leu Lys Trp
      100              105              110
Pro Asn Asp Val Leu Val Asp Leu Asp Thr Asp Gln Gly Gly Lys Val
      115              120              125
Cys Gly Ile Leu Ser Glu Arg
      130              135

```

<210> 1591
 <211> 424
 <212> DNA
 <213> Homo sapiens

<400> 1591
 agatctctct ccctgagata acccaggctt tagaaccaaa gagctgagag accctgtccc
 60
 ttcagagagg cacttgcacc tagaggagtc tctgggaagc agatggggat atgggacaga
 120
 cgcctcttga aaaagccccc agatgcctcc ctatggagga cctcaccac ccacatcacc
 180
 agtagggagc ttgggactta ccctaaccac aggggggtga ctgttgctgt cctgcacag
 240
 aacgtccagc gagtctgac tttccagccg ctgcgcttca tccaggagca cgtcctgac
 300
 cctgtctttg acctcagcgg ccccagcagt ctggcccagc ctgtccagta ctcccttgac
 360
 tgtgggatcc ctggctgctc acgccctga ggaccctcg gatctgctcc agcacgtgaa
 420
 attt
 424

<210> 1592
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 1592
 Met Gly Ile Trp Asp Arg Arg Ile Leu Lys Lys Pro Pro Asp Ala Ser
 1 5 10 15
 Leu Trp Arg Thr Ser Pro Thr His Ile Thr Ser Arg Glu Leu Gly Thr
 20 25 30
 Tyr Pro Asn His Arg Gly Val Thr Val Val Val Pro Ala Gln Asn Val
 35 40 45
 Gln Arg Val Leu Thr Phe Gln Pro Leu Arg Phe Ile Gln Glu His Val
 50 55 60
 Leu Ile Pro Val Phe Asp Leu Ser Gly Pro Ser Ser Leu Ala Gln Pro
 65 70 75 80
 Val Gln Tyr Ser Leu Asp Cys Gly Ile Pro Gly Cys Ser Arg Pro
 85 90 95

<210> 1593
 <211> 1678
 <212> DNA
 <213> Homo sapiens

<400> 1593
 cttgaatcta aaataaatga aataaacaca gaaattaacc agttgattga aaagaaaatg
 60
 atgagaaaatg agcccattga aggcaaacctc tcaactgtata ggcaacaggc atctatcatt
 120
 tcccgtaaaa aagaagccaa agctgaggaa cttcaggagg ccaaggagaa gttagccagc
 180

ctagagagag aagcatcagt aaagagaaat cagacccgtg aatttgatgg tactgaagtt
240
ttaaagggag atgagttcaa acgatatgtc aataaacttc gaagcaagag tacagttttc
300
aaaaagaagc atcacataat agctgaactt aaagctgaat tcggtctttt gcagaggact
360
gaagaacttc ttaagcaacg tcatgaaaat attcaacaac aactgcaaac tatggaggag
420
aaaaagggta tatctggata tagttacacc caagaagagc tagaaagagt atctgcactg
480
aagagtgaag ttgatgaaat gaaaggacga acattggatg atatgtctga aatggtgaaa
540
aaactgtatt cattggatc tgaaaagaag tcagctcttg cctcagttat aaaagagcta
600
cgacagttgc gtcaaaaata tcaagaactg acccaggagt gtgatgaaaa gaaatccag
660
tatgatagct gtgcagcagg cctcgaaagc aatcggtcca aattagaaca ggaagttaga
720
agactccgtg aagaatgtct tcaagaagaa agtagatacc attatacaaa ttgtatgatt
780
aagaacctag aagttcaact tcgtcgtgct actgatgaga tgaaggcata tatctcttct
840
gatcaacaag aaaaaagaaa ggcaattagg gaacagtata ccaaaaatac tgctgaacaa
900
gaaacacctg gaaagaaact tcgggaaaaa caaaaagtta tacgagaaag tcatgggtcca
960
aatatgaaac aagcaaaaat gtggcgtgat ttggaacaat taatggaatg taagaaacag
1020
tgctttctga aacaacaaag ccaacttcc attggtcagg taattcagga gggtggggag
1080
gaccggctaa tactgtgaat tcttgtgtca tcgtttggg ttttacttga taccactagc
1140
tataagccta atctcataat gtatttcttt ttgaaactg atttgtttag cattttgttt
1200
tcagaagagc cattctttat taagttttca tagaaaataa tgtaaggta gatttagttt
1260
gaatgttttt tcatatgaaa aagaggcttt tattcttttc catagttag acatcactgg
1320
cgtcttctga gttttatgag acaggaaact aagtttacta tctgtaaatg taaacatatg
1380
tccattaaga aacatgtagt ttttttttag aatgtaataa ccagtggt tactgttttt
1440
cttaatctct tttaaaaaaa ctttagaaga atcttttagg aactaatatc tcttgttctg
1500
aagaaacatt tatctgacgt tcagcagttc ctacagtttt acttcagttt atttttcttc
1560
tgtaaaatgc aagaaaattt aatattttga ctaacatgtc ttttctgttt gtatcattta
1620
aaggcaaata aacttggtac gtatttcata tctatttaaa aaatgaaaaa aaaaaaaa
1678

<210> 1594

<211> 365

<212> PRT

<213> Homo sapiens

<400> 1594

```

Leu Glu Ser Lys Ile Asn Glu Ile Asn Thr Glu Ile Asn Gln Leu Ile
 1           5           10           15
Glu Lys Lys Met Met Arg Asn Glu Pro Ile Glu Gly Lys Leu Ser Leu
      20           25           30
Tyr Arg Gln Gln Ala Ser Ile Ile Ser Arg Lys Lys Glu Ala Lys Ala
      35           40           45
Glu Glu Leu Gln Glu Ala Lys Glu Lys Leu Ala Ser Leu Glu Arg Glu
      50           55           60
Ala Ser Val Lys Arg Asn Gln Thr Arg Glu Phe Asp Gly Thr Glu Val
65           70           75           80
Leu Lys Gly Asp Glu Phe Lys Arg Tyr Val Asn Lys Leu Arg Ser Lys
      85           90           95
Ser Thr Val Phe Lys Lys Lys His His Ile Ile Ala Glu Leu Lys Ala
      100          105          110
Glu Phe Gly Leu Leu Gln Arg Thr Glu Glu Leu Leu Lys Gln Arg His
      115          120          125
Glu Asn Ile Gln Gln Gln Leu Gln Thr Met Glu Glu Lys Lys Gly Ile
      130          135          140
Ser Gly Tyr Ser Tyr Thr Gln Glu Glu Leu Glu Arg Val Ser Ala Leu
145          150          155          160
Lys Ser Glu Val Asp Glu Met Lys Gly Arg Thr Leu Asp Asp Met Ser
      165          170          175
Glu Met Val Lys Lys Leu Tyr Ser Leu Val Ser Glu Lys Lys Ser Ala
      180          185          190
Leu Ala Ser Val Ile Lys Glu Leu Arg Gln Leu Arg Gln Lys Tyr Gln
      195          200          205
Glu Leu Thr Gln Glu Cys Asp Glu Lys Lys Ser Gln Tyr Asp Ser Cys
      210          215          220
Ala Ala Gly Leu Glu Ser Asn Arg Ser Lys Leu Glu Gln Glu Val Arg
225          230          235          240
Arg Leu Arg Glu Glu Cys Leu Gln Glu Glu Ser Arg Tyr His Tyr Thr
      245          250          255
Asn Cys Met Ile Lys Asn Leu Glu Val Gln Leu Arg Arg Ala Thr Asp
      260          265          270
Glu Met Lys Ala Tyr Ile Ser Ser Asp Gln Gln Glu Lys Arg Lys Ala
      275          280          285
Ile Arg Glu Gln Tyr Thr Lys Asn Thr Ala Glu Gln Glu Asn Leu Gly
      290          295          300
Lys Lys Leu Arg Glu Lys Gln Lys Val Ile Arg Glu Ser His Gly Pro
305          310          315          320
Asn Met Lys Gln Ala Lys Met Trp Arg Asp Leu Glu Gln Leu Met Glu
      325          330          335
Cys Lys Lys Gln Cys Phe Leu Lys Gln Gln Ser Gln Thr Ser Ile Gly
      340          345          350
Gln Val Ile Gln Glu Gly Gly Glu Asp Arg Leu Ile Leu
      355          360          365

```

<210> 1595

<211> 559

<212> DNA

<213> Homo sapiens

<400> 1595

accggtcccg ctcacaggcc cacacctgct tctcctcctg gggcagggca gcttgggtggg
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 gcatggcccg ggagccgccc acttggcgag gaacaggctc catagcgacc tcagaacact
 120
 ggtgctgggg ccagccagg gagagcatct tcccgtggg accttccccg gggcggtca
 180
 tcccttgagg atgtaggggtg cagctgagat ggtggcgcc ccattcctgc tgttcgccag
 240
 cctgggctgg gggtagtagg atcaccttg ggctgatgag gagccccggg cttgggcagt
 300
 taccaagtgg ggggtcacag tctggaaagt ggtggaacca agggagcggc ctgcccagg
 360
 ccacactctc aaatactggc cctcgacaaa aggcagctgg gctctcaaga cagggccacc
 420
 tcctctctgc tgggcccgcg cccgtggaga gcaagtggga actgacccta tcttctgtcc
 480
 cagcttgagg agccagcatc aaggtcaggc ctacttgcc caagaaagag gagtgaggag
 540
 gccactgga ggaacgcgt
 559

<210> 1596

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1596

Met	Leu	Ala	Leu	Gln	Ala	Gly	Thr	Glu	Asp	Arg	Val	Ser	Ser	His	Leu
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Leu	Ser	Thr	Gly	Ala	Gly	Pro	Ala	Glu	Arg	Arg	Trp	Pro	Cys	Leu	Glu
			20					25					30		
Ser	Pro	Ala	Ala	Phe	Cys	Arg	Gly	Pro	Val	Phe	Glu	Ser	Val	Ala	Trp
		35					40					45			
Ala	Arg	Pro	Leu	Pro	Trp	Phe	His	His	Phe	Pro	Asp	Cys	Asp	Pro	Pro
		50				55					60				
Leu	Gly	Asn	Cys	Pro	Arg	Pro	Gly	Leu	Leu	Ile	Ser	Pro	Arg	Val	Ile
65					70					75				80	
Leu	Val	Pro	Pro	Ala	Gln	Ala	Gly	Glu	Gln	Gln	Glu	Trp	Gly	Arg	His
			85					90					95		
His	Leu	Ser	Cys	Thr	Leu	His	Leu	Gln	Gly	Met	Ser	Arg	Pro	Gly	Glu
			100					105					110		
Gly	Pro	Ser	Gly	Lys	Met	Leu	Ser	Leu	Ala	Gly	Pro	Gln	His	Gln	Cys
		115					120					125			
Ser	Glu	Val	Ala	Met	Glu	Pro	Val	Pro	Arg	Gln	Val	Gly	Gly	Ser	Pro
		130				135					140				
Ala	Met	Pro	His	Gln	Ala	Ala	Leu	Pro	Gln	Glu	Lys	Gln	Val	Trp	
145					150					155				160	
Ala	Cys	Glu	Arg	Asp	Arg										
					165										

<210> 1597

<211> 609

<212> DNA

<213> Homo sapiens

<400> 1597

tcgtcaacgg aaacttcggc cttcgggcct acccataatc cttgggacct tgaacgggta
 60
 ccgggtgggt ccgggtgggtg ttcagcagct agcttggctt cctttcaggc cccgttggct
 120
 ttgggcactg ataccggggg ctcgatccgc caacctggag cggtgaccgg caccgtcggg
 180
 atcaagccga cctacgggtc gacctccga tacggcggtta tcgctatggc ttcattcttg
 240
 gataactctg ggcctgcgc ccgtaccgtc cttgacgccg cgttgctcca tcaggccatt
 300
 gccggtcacg acgctatgga ccagaccacg attaatacgc ccaccccggc ggtcgttgag
 360
 gctgcgcggc aggcagacgt ttccgggggtg cgcattggcg ttgtcacgga gttgagcggg
 420
 cagggttacg accctcaggt cgaggcccg ttccacgagg ctgtcgagat gctaatagag
 480
 gcgggggctg aggtcgttga ggtctcttgc ccgaactttg acctcgcctt acctgcttat
 540
 taccttattc agcctgccga ggtgtctagc aacctggctc gttacgacgc catgcgttac
 600
 ggcttacgc
 609

<210> 1598

<211> 203

<212> PRT

<213> Homo sapiens

<400> 1598

Ser	Ser	Thr	Glu	Thr	Ser	Ala	Phe	Gly	Pro	Thr	His	Asn	Pro	Trp	Asp
1				5					10					15	
Leu	Glu	Arg	Val	Pro	Gly	Gly	Ser	Gly	Gly	Ser	Ala	Ala	Ser	Leu	
			20					25					30		
Ala	Ser	Phe	Gln	Ala	Pro	Leu	Ala	Leu	Gly	Thr	Asp	Thr	Gly	Gly	Ser
		35					40					45			
Ile	Arg	Gln	Pro	Gly	Ala	Val	Thr	Gly	Thr	Val	Gly	Ile	Lys	Pro	Thr
	50					55				60					
Tyr	Gly	Ser	Thr	Ser	Arg	Tyr	Gly	Val	Ile	Ala	Met	Ala	Ser	Ser	Leu
65				70					75					80	
Asp	Thr	Pro	Gly	Pro	Cys	Ala	Arg	Thr	Val	Leu	Asp	Ala	Ala	Leu	Leu
			85					90						95	
His	Gln	Ala	Ile	Ala	Gly	His	Asp	Ala	Met	Asp	Gln	Thr	Thr	Ile	Asn
		100					105						110		
Gln	Pro	Thr	Pro	Ala	Val	Val	Glu	Ala	Ala	Arg	Gln	Ala	Asp	Val	Ser
		115					120					125			
Gly	Val	Arg	Ile	Gly	Val	Val	Thr	Glu	Leu	Ser	Gly	Gln	Gly	Tyr	Asp
	130					135					140				
Pro	Gln	Val	Glu	Ala	Arg	Phe	His	Glu	Ala	Val	Glu	Met	Leu	Ile	Glu
145				150						155				160	
Ala	Gly	Ala	Glu	Val	Val	Glu	Val	Ser	Cys	Pro	Asn	Phe	Asp	Leu	Ala

	165		170		175									
Leu	Pro	Ala	Tyr	Leu	Ile	Gln	Pro	Ala	Glu	Val	Ser	Ser	Asn	Leu
	180		185		190									
Ala	Arg	Tyr	Asp	Ala	Met	Arg	Tyr	Gly	Leu	Arg				
	195		200											

<210> 1599
 <211> 526
 <212> DNA
 <213> Homo sapiens

<400> 1599
 gcgtggccga cggctgctgt gtggtcagcg atctttatctt ttcttgatcg attcagaacc
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 120
 agcatgcacg tgaacacgtg gatggccggg atgctctcgg tgacaggtgg ggttgatcca
 180
 gcacggggcg ccggctccggc agtgtattcg gctccctttg ttgaggaatc atgcaaggcg
 240
 cttgtgcttt tcgcgctggc catcggcacg gggcgacgga tgacctcggg agttcagacg
 300
 gtgagcatgg ccgggctctc ggcaattggg ttgccttttg ttgagaacat tatgtactac
 360
 gcccgctcag ataactacgc ccgtgtgacg gcttcgggtg gggaccccaa acaaggcggt
 420
 gatgaagttg gtgctgttgc ggggagtgtg tgcctcgttt gggcatccgc tgttcaccag
 480
 catgacgggt atcgggtctgg cccttgggct gaggtcacga agttga
 526

<210> 1600
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 1600
 Met His Val Asn Thr Trp Met Ala Gly Met Leu Ser Val Thr Gly Gly
 1 5 10 15
 Val Asp Pro Ala Ser Gly Ala Gly Pro Ala Val Tyr Ser Ala Pro Phe
 20 25 30
 Val Glu Glu Ser Cys Lys Ala Leu Val Leu Phe Ala Leu Ala Ile Gly
 35 40 45
 Met Gly Arg Arg Met Thr Ser Val Val Gln Thr Val Ser Met Ala Gly
 50 55 60
 Leu Ser Ala Ile Gly Phe Ala Phe Val Glu Asn Ile Met Tyr Tyr Ala
 65 70 75 80
 Arg Ala Asp Asn Tyr Ala Arg Val Thr Ala Ser Gly Gly Asp Pro Lys
 85 90 95
 Gln Gly Val Asp Glu Val Gly Ala Val Ala Gly Ser Val Cys Leu Val
 100 105 110
 Trp Ala Ser Ala Val His Gln His Asp Gly Tyr Arg Ser Gly Pro Trp
 115 120 125
 Ala Glu Val Thr Lys Leu

130

<210> 1601
 <211> 447
 <212> DNA
 <213> Homo sapiens

<400> 1601
 gccggccgcc ccgtttccgc agattctgga ggagtgccga tggccgagtt catctacacc
 60
 atgcacaacg tccgaaaggc ggtgggtgac aaagttatcc ttgacaatgt cacgctgtcg
 120
 ttcttcccg ggcgaagat tgggtgtgtc ggaccgaatg gcgctggcaa atcgacgatg
 180
 ctcaagctca tggctggtct cgataagccc aataacggcg atgccaactt ggctaaaggc
 240
 gccaccgtcg gaatcttget tcaggagccc ccgctcaccg aggacaaaac tgttcgagag
 300
 aacgtcgaag aggccgtcgg cgacatcaaa gccaaagtgg cacgggtcga ggaagtctcc
 360
 gccgagatgg ccaaccctga cgccgacttt gacgccctga tggcggagat ggggtgagctg
 420
 cagaccgagc tcgataacgc caacgcg
 447

<210> 1602
 <211> 136
 <212> PRT
 <213> Homo sapiens

<400> 1602
 Met Ala Glu Phe Ile Tyr Thr Met His Asn Val Arg Lys Ala Val Gly
 1 5 10 15
 Asp Lys Val Ile Leu Asp Asn Val Thr Leu Ser Phe Phe Pro Gly Ala
 20 25 30
 Lys Ile Gly Val Val Gly Pro Asn Gly Ala Gly Lys Ser Thr Met Leu
 35 40 45
 Lys Leu Met Ala Gly Leu Asp Lys Pro Asn Asn Gly Asp Ala Asn Leu
 50 55 60
 Ala Lys Gly Ala Thr Val Gly Ile Leu Leu Gln Glu Pro Pro Leu Thr
 65 70 75 80
 Glu Asp Lys Thr Val Arg Glu Asn Val Glu Glu Ala Val Gly Asp Ile
 85 90 95
 Lys Ala Lys Leu Ala Arg Phe Glu Glu Val Ser Ala Glu Met Ala Asn
 100 105 110
 Pro Asp Ala Asp Phe Asp Ala Leu Met Ala Glu Met Gly Glu Leu Gln
 115 120 125
 Thr Glu Leu Asp Asn Ala Asn Ala
 130 135

<210> 1603
 <211> 540
 <212> DNA
 <213> Homo sapiens

<400> 1603

acgcgtaagc tcaccgaagc catgatggca atgctgctgg aactgcatta cagcaagcag
 60
 gaaatccttg aggcgtaacct caacgaggtc ttcgtcggtc aggatggcca gcgcgccgtg
 120
 cacggggttg gcttgggccag tcagttcttc tttggccagc ctttgtccga gctgaagttg
 180
 catcaagtcg cgttgttggc cgggatggtc aagggcccg cctattacaa cccgcggcgc
 240
 aatccggaac gtgcgctcga gcgtcgtaac ctgggtgctgg atgtgctgga acagcagggc
 300
 gtagccactg ccgaacaagt cgctgccgca aagaaaatgc cgctgggtgt aaccactcgc
 360
 ggcaagctgg cggacagctc cttcccaggc tttatcgacc tggcacaacg ccagttgcgt
 420
 gaagattacc gcgacgaaga cttgaccgaa gaaggcctgc ggattttcac cagtttcgac
 480
 ccgattctgc agatgaaagc cgaagcatcg gtgaacgaca cattcaagcg cctgaccggc
 540

<210> 1604

<211> 180

<212> PRT

<213> Homo sapiens

<400> 1604

Thr	Arg	Lys	Leu	Thr	Glu	Ala	Met	Met	Ala	Met	Leu	Leu	Glu	Leu	His
1				5					10					15	
Tyr	Ser	Lys	Gln	Glu	Ile	Leu	Glu	Ala	Tyr	Leu	Asn	Glu	Val	Phe	Val
			20					25					30		
Gly	Gln	Asp	Gly	Gln	Arg	Ala	Val	His	Gly	Phe	Gly	Leu	Ala	Ser	Gln
		35					40					45			
Phe	Phe	Phe	Gly	Gln	Pro	Leu	Ser	Glu	Leu	Lys	Leu	His	Gln	Val	Ala
	50					55					60				
Leu	Leu	Val	Gly	Met	Val	Lys	Gly	Pro	Ser	Tyr	Tyr	Asn	Pro	Arg	Arg
65					70					75				80	
Asn	Pro	Glu	Arg	Ala	Leu	Glu	Arg	Arg	Asn	Leu	Val	Leu	Asp	Val	Leu
			85					90					95		
Glu	Gln	Gln	Gly	Val	Ala	Thr	Ala	Glu	Gln	Val	Ala	Ala	Ala	Lys	Lys
			100					105					110		
Met	Pro	Leu	Gly	Val	Thr	Thr	Arg	Gly	Lys	Leu	Ala	Asp	Ser	Ser	Phe
		115					120					125			
Pro	Gly	Phe	Ile	Asp	Leu	Val	Lys	Arg	Gln	Leu	Arg	Glu	Asp	Tyr	Arg
	130					135					140				
Asp	Glu	Asp	Leu	Thr	Glu	Glu	Gly	Leu	Arg	Ile	Phe	Thr	Ser	Phe	Asp
145				150					155					160	
Pro	Ile	Leu	Gln	Met	Lys	Ala	Glu	Ala	Ser	Val	Asn	Asp	Thr	Phe	Lys
			165					170						175	
Arg	Leu	Thr	Gly												
			180												

<210> 1605

<211> 427

<212> DNA

<213> Homo sapiens

<400> 1605

```

acgcgttggg gcggtcgggc gcacgcagtc cgtccaagag gtacaggcca gcgttgccgc
60
cattctttgc gggcgggatc tgcactggga tattgcggcc catgcctgt gaccacacat
120
cgcagcgtg gacccaccag cccacctggt cccactcgca cgtgccagta ctgtccgcac
180
gcaagaaatc gcggtgagct gcgtgcgcct gctgggtgcc gcctgccact acggcaagac
240
ccagcgtac ggcgactgcc atgatgaccg aaaggacgcg acccctaata gatgcagtca
300
tctttctcct tcacaaagta tttggttaatt gtcacttagc tttatcgctc ggaatctgtg
360
aaccgtaaac atcccgcgc ggaagctaac tagcaagcag tctaatacac tcccgggcca
420
aatgttg
427

```

<210> 1606

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1606

```

Met Thr Ala Ser Ile Arg Gly Arg Val Leu Ser Val Ile Met Ala Val
1           5           10           15
Ala Val Ala Leu Gly Leu Ala Val Val Ala Gly Gly Thr Gln Gln Ala
20           25           30
His Ala Ala His Arg Asp Phe Leu Arg Ala Asp Ser Thr Gly Thr Cys
35           40           45
Glu Trp Asp Gln Val Gly Trp Trp Val Gln Arg Cys Asp Val Trp Ser
50           55           60
Gln Ala Met Gly Arg Asn Ile Pro Val Gln Ile Pro Pro Ala Lys Asn
65           70           75           80
Gly Gly Asn Ala Gly Leu Tyr Leu Leu Asp Gly Leu Arg Ala Thr Asp
85           90           95
Arg Thr Asn Ala
100

```

<210> 1607

<211> 396

<212> DNA

<213> Homo sapiens

<400> 1607

```

gcacggctcc gctcgggcc gccgtgatgg tacataccgg cgcgaccgtg atcgattctt
60
tgccgcaagg caatttactt ccacgtcacg gccgatgcga tgaagatgac gattcgtaa
120
cggatgggac tgatcccgtg cagggcgatc gtgggcggga cgatgatgat cgtggcgacg
180

```

ttgctgtacg gattcatttt gtagcataaa taaggagggg ttcgatgaac aggaaaaccc
 240
 tttctgttgg caccgattc gttcaaggaa agcatgacgg caaaagaagt ctgtatcgcg
 300
 atggaaaaag gactgagccg cgtctacccc gacgcccggg ttatccatgt gccgatggcg
 360
 gacggaggcg aaggcacggg gcagtcgctg gtcgac
 396

<210> 1608

<211> 56

<212> PRT

<213> Homo sapiens

<400> 1608

Thr	Gly	Lys	Pro	Phe	Leu	Leu	Ala	Pro	Asp	Ser	Phe	Lys	Glu	Ser	Met
1				5				10					15		
Thr	Ala	Lys	Glu	Val	Cys	Ile	Ala	Met	Glu	Lys	Gly	Leu	Ser	Arg	Val
			20				25					30			
Tyr	Pro	Asp	Ala	Arg	Phe	Ile	His	Val	Pro	Met	Ala	Asp	Gly	Gly	Glu
		35				40					45				
Gly	Thr	Val	Gln	Ser	Leu	Val	Asp								
	50					55									

<210> 1609

<211> 505

<212> DNA

<213> Homo sapiens

<400> 1609

acgcgtagat gccacagcgc caggacacac gccaccgcgg agccgaggat gatccacatg
 60
 ggctcgactc acatggacgc catggattcg gcagtgaggaga gcaggccgcg agcttcgcac
 120
 gcggcccgcg tgcgtagtcg cgtcatctca gtgcacatct gttcttcccc gtcgatgagg
 180
 ttcgcggcgt aggacatcgt tacgtccagc atggtggcga tctcagcaat gtcacagccg
 240
 gccttgtgga gggcgaggag ccgagcgcgc gtgcttcctg ctggcacgat gcgttcacgt
 300
 gctgcgttga tgctgctgat actgatatgc aggatgcgcc cggggtcgaa gacggggaat
 360
 ggggtgaatt ggacggtccc ccctggccag cgagtcgttg gacgattcga ctggggacat
 420
 gcgcgagcag ggcgacgaca cgccacggaa cgcggcattc atggacgagg gaacggacat
 480
 ggagcgagaa aaagcgggcg tcgac
 505

<210> 1610

<211> 129

<212> PRT

<213> Homo sapiens

<400> 1610

```

Met Pro Arg Ser Val Ala Cys Arg Arg Pro Ala Arg Ala Cys Pro Gln
 1          5          10          15
Ser Asn Arg Pro Thr Thr Arg Trp Pro Gly Gly Thr Val Gln Phe Thr
      20          25          30
Pro Phe Pro Val Phe Asp Pro Gly Arg Ile Leu His Ile Ser Ile Asp
      35          40          45
Asp Ile Asn Ala Ala Arg Glu Arg Ile Val Pro Ala Gly Ser Thr Arg
      50          55          60
Ala Arg Leu Leu Ala Leu His Lys Ala Gly Cys Asp Ile Ala Glu Ile
      65          70          75          80
Ala Thr Met Leu Asp Val Thr Met Ser Tyr Ala Ala Asn Leu Met Ser
      85          90          95
Gly Glu Glu Gln Met Cys Thr Glu Met Thr Arg Leu Arg Ser Arg Ala
      100          105          110
Ala Cys Glu Ala Arg Gly Leu Leu Ser Thr Ala Glu Ser Met Ala Ser
      115          120          125
Met

```

<210> 1611

<211> 532

<212> DNA

<213> Homo sapiens

<400> 1611

```

acgcgtgctg cgtttacagt tgcgtctatt gatttaggtg cgcattccaga atttttagga
60
aaaaatgata ttcaattagg caaaaaagaa tctgtagagg atactgcgaa agtattaggt
120
agaatgttcg atggtattga attccgtggt ttttcacaac aagctggtga agatttagcg
180
aagttctctg gtgtaccggg gtggaatgga ttaacagacg attggcatcc tacacaaatg
240
ttagctgatt ttatgacaat aaaagagaat tttggatatc tagaaggaat aaacttaact
300
tacgttggag atggacgtaa taatattgcy cattcattaa tggtagcagg tgctatgtta
360
ggtgttaatg taagaatttg tacacctaaa tcattaaatc caaaagaggc atatgttgat
420
attgcaaaag aaaaagcgag tcaatatggt gggtcagtca tgattacgga taatattgca
480
gaagcagttg aaaatacaga tgctatatat acagatgttt gggtatcgac gg
532

```

<210> 1612

<211> 177

<212> PRT

<213> Homo sapiens

<400> 1612

```

Thr Arg Ala Ala Phe Thr Val Ala Ser Ile Asp Leu Gly Ala His Pro
 1          5          10          15
Glu Phe Leu Gly Lys Asn Asp Ile Gln Leu Gly Lys Lys Glu Ser Val

```

```

      20      25      30
Glu Asp Thr Ala Lys Val Leu Gly Arg Met Phe Asp Gly Ile Glu Phe
      35      40      45
Arg Gly Phe Ser Gln Gln Ala Gly Glu Asp Leu Ala Lys Phe Ser Gly
      50      55      60
Val Pro Gly Trp Asn Gly Leu Thr Asp Asp Trp His Pro Thr Gln Met
      65      70      75      80
Leu Ala Asp Phe Met Thr Ile Lys Glu Asn Phe Gly Tyr Leu Glu Gly
      85      90      95
Ile Asn Leu Thr Tyr Val Gly Asp Gly Arg Asn Asn Ile Ala His Ser
      100      105      110
Leu Met Val Ala Gly Ala Met Leu Gly Val Asn Val Arg Ile Cys Thr
      115      120      125
Pro Lys Ser Leu Asn Pro Lys Glu Ala Tyr Val Asp Ile Ala Lys Glu
      130      135      140
Lys Ala Ser Gln Tyr Gly Gly Ser Val Met Ile Thr Asp Asn Ile Ala
      145      150      155      160
Glu Ala Val Glu Asn Thr Asp Ala Ile Tyr Thr Asp Val Trp Val Ser
      165      170      175
Thr

```

<210> 1613

<211> 584

<212> DNA

<213> Homo sapiens

<400> 1613

```

nnacgcggttc agccgagaaa tatgctgctt ttgcctgcc acctcacaaa tgctacggca
60
cagggcggtcc aggttttgcg cctcctggta cggtgctaca cacttgctca cctcccagcg
120
gtatcaatac aacttgcgaa atgcagacaa ggcccaggcc taagacatgg tagacataca
180
tatatacaag gaattcacta tatattgggt gaaaggagat cttcccgttc ctgttcttcc
240
tctgccgcat cctgtgaagc gttcagggag gtcgacatgg ataatgtgcg tatgcctggc
300
acggtaaaagt gtcgcgggct ttagatgcg tgtgaacgtt ttcgtgactt gaagaggtcg
360
aagctgatgt gttcgcgtga gtcgatgca gcgcgctgcg ttgcgtgcct tgtggtcgat
420
cgtcgccccg atccgataga atgcggagtt gtattttcgt agtactgctc gacaatgcca
480
gtgggcgagg cgatgagttc ctcatattgcg tctttctcga ggtcttggtc catgtccata
540
aacataccaa agctggatgg gtcatacgac ggcgcagcat gcat
584

```

<210> 1614

<211> 153

<212> PRT

<213> Homo sapiens

<400> 1614

Xaa Arg Val Gln Pro Arg Asn Met Leu Leu Phe Ala Cys His Leu Thr
 1 5 10 15
 Asn Ala Thr Ala Gln Gly Val Gln Val Leu Arg Leu Leu Val Arg Cys
 20 25 30
 Tyr Thr Leu Ala His Leu Pro Ala Val Ser Ile Gln Leu Ala Lys Cys
 35 40 45
 Arg Gln Gly Pro Gly Leu Arg His Gly Arg His Thr Tyr Ile Gln Gly
 50 55 60
 Ile His Tyr Ile Leu Gly Glu Arg Arg Ser Ser Arg Ser Cys Ser Ser
 65 70 75 80
 Ser Ala Ala Ser Cys Glu Ala Phe Arg Glu Val Asp Met Asp Asn Val
 85 90 95
 Arg Met Pro Gly Thr Val Lys Cys Arg Gly Leu Val Asp Ala Cys Glu
 100 105 110
 Arg Phe Arg Asp Leu Lys Arg Ser Lys Leu Met Cys Ser Arg Glu Leu
 115 120 125
 Asp Ala Ala Arg Cys Val Ala Cys Leu Val Val Asp Arg Arg Pro Asp
 130 135 140
 Pro Ile Glu Cys Gly Val Val Phe Ser
 145 150

<210> 1615

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1615

gccggcttgc ccgacgcgtc tatgggtgat gttctgtcct ctgtcgtcgg gccgtggggc
 60
 tcggtgcttg tcagtgtcgg tgtcatcatt tccctgcttg gggctctact ggcctggatc
 120
 ctactgtgcg gtgagacgat gcaggtgccg ggtgaggacg gcaccatgcc gaaactgttc
 180
 ggacggatca acaaacatga ggctccagct cccgctttgt ggatcaccaa catcgtctcc
 240
 cagatatgcc ttgtcatgac ggtgttgtgg gacggtgctt acttggcgat ggcgaccctg
 300
 gctgccgccc tcctcctggt gccgtacctg ctgtcagccg cattcgccct gaagatgggtg
 360
 atc
 363

<210> 1616

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1616

Ala Gly Leu Pro Asp Ala Ser Met Gly Asp Val Leu Ser Ser Val Val
 1 5 10 15
 Gly Pro Trp Gly Ser Val Leu Val Ser Ala Gly Val Ile Ile Ser Leu
 20 25 30
 Leu Gly Ala Leu Leu Ala Trp Ile Leu Leu Cys Gly Glu Thr Met Gln


```

      35          40          45
Val Pro Gly Glu Asp Gly Thr Met Pro Lys Leu Phe Gly Arg Ile Asn
      50          55          60
Lys His Glu Ala Pro Ala Leu Trp Ile Thr Asn Ile Val Ser
      65          70          75          80
Gln Ile Cys Leu Val Met Thr Val Leu Trp Asp Gly Ala Tyr Leu Ala
      85          90          95
Met Ala Thr Leu Ala Ala Ala Leu Ile Leu Val Pro Tyr Leu Leu Ser
      100          105          110
Ala Ala Phe Ala Leu Lys Met Val Ile
      115          120

```

<210> 1617

<211> 447

<212> DNA

<213> Homo sapiens

<400> 1617

```

accggtgact acctgtggga gaagaagggc atcggtccca tcctcaagat tgataagggc
60
ctggctgacg agggctgcca cgttcgtctc atgaagccga ttcccggcct cgacgagttg
120
gtgcaccgcg ccgtcgagga gaagcacatc ttcggtacca aggagcgctc tgtcatcctg
180
gatgacgaca aagctggcat cgaaaagatt gtcgaccagc agttcgaact ggccgaacag
240
gtgcgcgctg cgggtcttgt gccgatectc gaacccgagg tcgacatcca cgctccacat
300
aaggagaagg ctgaggaaag gctgcacaac ctcatccgcg agcacatcga ctctctgccg
360
ctcgacgcca agatcatggt gaagctgacg atcccagagt ccgaagacct gtatgccgac
420
ctcattgctg atccgaaggt cctacgc
447

```

<210> 1618

<211> 149

<212> PRT

<213> Homo sapiens

<400> 1618

```

Thr Gly Asp Tyr Leu Trp Glu Lys Lys Gly Ile Val Pro Ile Leu Lys
1      5      10      15
Ile Asp Lys Gly Leu Ala Asp Glu Gly Cys His Val Arg Leu Met Lys
      20      25      30
Pro Ile Pro Gly Leu Asp Glu Leu Val His Arg Ala Val Glu Glu Lys
      35      40      45
His Ile Phe Gly Thr Lys Glu Arg Ser Val Ile Leu Asp Asp Asp Lys
      50      55      60
Ala Gly Ile Glu Lys Ile Val Asp Gln Gln Phe Glu Leu Ala Glu Gln
      65      70      75      80
Val Arg Ala Ala Gly Leu Val Pro Ile Leu Glu Pro Glu Val Asp Ile
      85      90      95
His Ala Pro His Lys Glu Lys Ala Glu Glu Arg Leu His Asn Leu Ile

```

100 105 110
 Arg Glu His Ile Asp Ser Leu Pro Leu Asp Ala Lys Ile Met Leu Lys
 115 120 125
 Leu Thr Ile Pro Ser Ser Glu Asp Leu Tyr Ala Asp Leu Ile Ala Asp
 130 135 140
 Pro Lys Val Leu Arg
 145

<210> 1619
 <211> 355
 <212> DNA
 <213> Homo sapiens

<400> 1619
 nnggtaccga aaccctgtgc gctaccgcat aaaatcaaag gaactagtat gcataacgta
 60
 acaacaaatg gtgcctccat tcccgcctt ggccttggca ctttcggtat gcccggcgaa
 120
 gatgtgcttc gcatcgcccc ttacgcgctc aaggctgggt ttcgccatgt cgataccgcg
 180
 cagatttatg gcaatgaagt cgaggctcgg gaagcaattg cgacttcgg cgttcagcgt
 240
 ggcgacatct ttctgaccac aaaagtctgg gtagataatt ataagcatga tgctttcatc
 300
 gcatctgtcg atgaaagcct taccaagctt aagaccgact atgtcgatct gctgc
 355

<210> 1620
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 1620
 Xaa Val Pro Lys Pro Val Ser Leu Pro His Lys Ile Lys Gly Thr Ser
 1 5 10 15
 Met His Asn Val Thr Thr Asn Gly Ala Ser Ile Pro Ala Leu Gly Leu
 20 25 30
 Gly Thr Phe Arg Met Pro Gly Glu Asp Val Leu Arg Ile Val Pro Tyr
 35 40 45
 Ala Leu Lys Ala Gly Phe Arg His Val Asp Thr Ala Gln Ile Tyr Gly
 50 55 60
 Asn Glu Val Glu Val Gly Glu Ala Ile Ala Thr Ser Gly Val Gln Arg
 65 70 75 80
 Gly Asp Ile Phe Leu Thr Thr Lys Val Trp Val Asp Asn Tyr Lys His
 85 90 95
 Asp Ala Phe Ile Ala Ser Val Asp Glu Ser Leu Thr Lys Leu Lys Thr
 100 105 110
 Asp Tyr Val Asp Leu Leu
 115

<210> 1621
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 1621

gcgcgccatg gaggcgcccc gggtcgcgcc aggatgctcc aggccaaagtg aagcgggtccg
 60
 gctgggggtcg gcgggacccg cggggccatgt acggcgacat attcaacgcc acggggcggg
 120
 cccccgaggc ggcggtaggc agcgcgctgg ccccaggagc cacgggtcaag gcagaaggcg
 180
 ctttgccgct ggagctggcc actgcgcgcg gtatgaggga cggcgcggcc acaaagcccc
 240
 acctgcccac ctacctgctg ctctttcttcc tgetgctgct ctcgggggcg ctcgggcgcc
 300
 tcttcacggt ttgccagctg cgccattcgg ccttcgcgcg gctgccccac gaccgcttcg
 360
 ctgcgcacgc ccgcgcgccc ggaagg
 386

<210> 1622

<211> 126

<212> PRT

<213> Homo sapiens

<400> 1622

Met Glu Ala Pro Arg Val Ala Pro Gly Cys Ser Arg Pro Ser Glu Ala
 1 5 10 15
 Val Arg Leu Gly Ser Ala Gly Pro Ala Gly His Val Arg Arg His Ile
 20 25 30
 Gln Arg His Gly Ala Gly Pro Arg Gly Gly Gly Arg Gln Arg Ala Gly
 35 40 45
 Pro Arg Ser His Gly Gln Gly Arg Arg Arg Phe Ala Ala Gly Ala Gly
 50 55 60
 His Cys Ala Arg Tyr Glu Gly Arg Arg Gly His Lys Ala Arg Pro Ala
 65 70 75 80
 His Leu Pro Ala Ala Leu Leu Pro Ala Ala Ala Leu Gly Gly Ala Arg
 85 90 95
 Arg Pro Leu His Arg Leu Pro Ala Ala Pro Phe Gly Leu Arg Arg Ala
 100 105 110
 Ala Pro Arg Pro Leu Arg Ser Arg Arg Pro Arg Ala Arg Lys
 115 120 125

<210> 1623

<211> 314

<212> DNA

<213> Homo sapiens

<400> 1623

nctggtgccc agagcctcgt cggggtccag ccccagggcc tttgcgagtc agacacttgg
 60
 ggcccttgct tgtggttttt ctgggagctt tgggcccagg gttccccgga cccttcctg
 120
 aacttttccg cagtttcaga ggagagtctg caagtgcgag ctgcagtgac tgtgccttgt
 180
 gcttggcacc caagcagggc atgggagtct taagtgaac cagggcctca aggacaacag
 240

agagccgcat ggcagggtag acacctggat aaaagtgggt gggggaagcc cactgctgca
 300
 ccccgggcat tgct
 314

<210> 1624
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1624
 Met Pro Gly Val Gln Gln Trp Ala Ser Pro Thr His Phe Tyr Pro Gly
 1 5 10 15
 Val Tyr Pro Ala Met Arg Leu Ser Val Val Leu Glu Ala Leu Val Pro
 20 25 30
 Leu Lys Thr Pro Met Pro Cys Leu Gly Ala Lys His Lys Ala Gln Ser
 35 40 45
 Leu Gln Leu Ser Leu Ala Asp Ser Pro Leu Lys Leu Arg Lys Ser Ser
 50 55 60
 Gly Lys Gly Pro Gly Asn Pro Arg Pro Lys Ala Pro Arg Lys Thr Thr
 65 70 75 80
 Ser Lys Gly Pro Lys Cys Leu Thr Arg Lys Gly Pro Gly Ala Gly Pro
 85 90 95
 Arg Arg Gly Ser Gly His Gln
 100

<210> 1625
 <211> 619
 <212> DNA
 <213> Homo sapiens

<400> 1625
 acgcgtactc agcagcaagt tctgctgagc cccaaatcca cacagactga gcctggacca
 60
 gggctggggc ctccttatcc aagccaatcc agggaaacac tgtgctgact tcaaggcaga
 120
 agggacaaga aagcatgact gtgcacaaat tggctttgca gccatctcca ccaggtagcc
 180
 ctgggagcac ctgggaagaa gccgggccat gcaggagacc caacctcacc ctgcattcag
 240
 aaccgggcct tggaatggcc tgatctgagc cctagcacc ctgggaagcc gccaccttt
 300
 cttctggcct ctgggaagaa gatgggaatt ttaaggccat gggagaagac actcctggat
 360
 tctttcagct tctccacca cccctgctc cagatgtaat ctgggaagac tggggagtca
 420
 ggggcacagt gaggttggagc aggggattgg agggtttggt ggacagcctt ccagggcacc
 480
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<210> 1626
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1626
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 20 25 30
 Pro Gln Thr Leu Gln Ser Pro Ala Pro Thr His Cys Ala Pro Asp Ser
 35 40 45
 Pro Val Phe Pro Asp Tyr Ile Trp Ser Arg Gly Trp Val Glu Lys Leu
 50 55 60
 Lys Glu Ser Arg Ser Val Phe Ser His Gly Leu Lys Ile Pro Ile Phe
 65 70 75 80
 Phe Pro Glu Ala Arg Arg Lys Val Gly Gly Phe Pro Gly Val Leu Gly
 85 90 95
 Leu Arg Ser Gly His Ser Lys Ala Arg Phe
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<210> 1627
 <211> 481
 <212> DNA
 <213> Homo sapiens

<400> 1627
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 360
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 480
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 481

<210> 1628
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1628
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His Gln Val Val Arg Ala Asp Ile Gln Gln Asp Thr Tyr Gly Gly Arg
      20             25             30
Val Gln Thr Arg Phe Pro Pro Glu Pro Asn Gly Tyr Leu His Ile Gly
      35             40             45
His Ala Lys Ala Ile Val Thr Asp Phe Gly Val Ala Glu Asp Phe Gly
      50             55             60
Gly Thr Cys Asn Leu Arg Leu Asp Asp Thr Asn Pro Gly Thr Glu Glu
      65             70             75             80
Thr Glu Tyr Val Glu Ser Ile Val Ala Asp Ile Glu Trp Leu Gly Tyr
      85             90             95
Ser Pro Ala His Val Val His Ala
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<210> 1629

<211> 4519

<212> DNA

<213> Homo sapiens

<400> 1629

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420
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480
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540
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600
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1020

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<210> 1630

<211> 496

<212> PRT

<213> Homo sapiens

<400> 1630

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Lys	Ala	Gln	Lys	Arg	Lys	Met	Glu	Glu	Ser	Asp	Glu	Glu	Ala	Val	Gln
			20					25					30		
Ala	Lys	Val	Leu	Arg	Pro	Leu	Arg	Ser	Cys	Asp	Glu	Pro	Leu	Thr	Pro
		35					40					45			
Pro	Pro	His	Ser	Pro	Thr	Ser	Met	Leu	Gln	Leu	Ile	His	Asp	Pro	Val
	50					55					60				
Ser	Pro	Arg	Gly	Met	Val	Thr	Arg	Ser	Ser	Pro	Gly	Ala	Gly	Pro	Ser
65					70					75				80	
Asp	His	His	Ser	Ala	Ser	Arg	Asp	Glu	Arg	Phe	Lys	Arg	Arg	Gln	Leu
			85						90					95	
Leu	Arg	Leu	Gln	Ala	Thr	Glu	Arg	Thr	Met	Val	Arg	Glu	Lys	Glu	Asn
			100						105				110		
Asn	Pro	Ser	Gly	Lys	Lys	Glu	Leu	Ser	Glu	Val	Glu	Lys	Ala	Lys	Ile
		115					120					125			
Arg	Gly	Ser	Tyr	Leu	Thr	Val	Thr	Leu	Gln	Arg	Pro	Thr	Lys	Glu	Leu
	130					135					140				
His	Gly	Thr	Ser	Ile	Val	Pro	Lys	Leu	Gln	Ala	Ile	Thr	Ala	Ser	Ser
145					150					155				160	
Ala	Asn	Leu	Arg	His	Ser	Pro	Arg	Val	Leu	Val	Gln	His	Cys	Pro	Ala
			165						170					175	
Arg	Thr	Pro	Gln	Arg	Gly	Asp	Glu	Glu	Gly	Leu	Gly	Gly	Glu	Glu	Glu
			180					185					190		
Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Asp	Asp	Ser	Ala	Glu	Glu	Gly	Gly
		195					200					205			
Ala	Ala	Arg	Leu	Asn	Gly	Arg	Gly	Ser	Trp	Ala	Gln	Asp	Gly	Asp	Glu
	210					215					220				
Ser	Trp	Met	Gln	Arg	Glu	Val	Trp	Met	Ser	Val	Phe	Arg	Tyr	Leu	Ser
225				230					235					240	
Arg	Arg	Glu	Leu	Cys	Glu	Cys	Met	Arg	Val	Cys	Lys	Thr	Trp	Tyr	Lys
			245						250					255	
Trp	Cys	Cys	Asp	Lys	Arg	Leu	Trp	Thr	Lys	Ile	Asp	Leu	Ser	Arg	Cys
			260					265					270		
Lys	Ala	Ile	Val	Pro	Gln	Ala	Leu	Ser	Gly	Ile	Ile	Lys	Arg	Gln	Pro
		275					280					285			
Val	Ser	Leu	Asp	Leu	Ser	Trp	Thr	Asn	Ile	Ser	Lys	Lys	Gln	Leu	Thr

290	295	300
Trp Leu Val Asn Arg	Leu Pro Gly Leu Lys Asp	Leu Leu Leu Ala Gly
305	310	315
Cys Ser Trp Ser Ala Val	Ser Ala Leu Ser Thr Ser Ser Cys Pro Leu	320
325	330	335
Leu Arg Thr Leu Asp Leu Arg Trp	Ala Val Gly Ile Lys Asp Pro Gln	340
340	345	350
Ile Arg Asp Leu Leu Thr Pro Pro	Ala Asp Lys Pro Gly Gln Asp Asn	355
355	360	365
Arg Ser Lys Leu Arg Asn Met Thr	Asp Phe Arg Leu Ala Gly Leu Asp	370
370	375	380
Ile Thr Asp Ala Thr Leu Arg Leu	Ile Ile Arg His Met Pro Leu Leu	385
385	390	395
Ser Arg Leu Asp Leu Ser His Cys	Ser His Leu Thr Asp Gln Ser Ser	400
405	410	415
Asn Leu Leu Thr Ala Val Gly Ser	Ser Thr Arg Tyr Ser Leu Thr Glu	420
420	425	430
Leu Asn Met Ala Gly Cys Asn Lys	Leu Thr Asp Gln Thr Leu Ile Tyr	435
435	440	445
Leu Arg Arg Ile Ala Asn Val Thr	Leu Ile Asp Leu Arg Gly Cys Lys	450
450	455	460
Gln Ile Thr Arg Lys Ala Cys Glu	His Phe Ile Ser Asp Leu Ser Ile	465
465	470	475
Asn Ser Leu Tyr Cys Leu Ser Asp	Glu Lys Leu Ile Gln Lys Ile Ser	480
485	490	495

<210> 1631

<211> 330

<212> DNA

<213> Homo sapiens

<400> 1631

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120
ccatgttgac tctcgcgacg agcttggtga gttgcttggc ttttcgaaag acgacattac
180
caaccaagtt cagcaagctg tgggcgcctt gggtttaccg ccactagaag atgaaaacgc
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acaaggtgaa gatccggcgt cgcaggtccc gccagtcacc gacgaggacc ccactgcttt
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330

<210> 1632

<211> 92

<212> PRT

<213> Homo sapiens

<400> 1632

Met Gln Cys Gln Asn Pro Asn Thr Arg Ala Ser Asp Met Ala Gly Trp
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Lys Thr Leu Gln Thr Leu Phe His Val Asp Ser Arg Asp Glu Leu Val

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      20      25      30
Glu Leu Leu Gly Phe Ser Lys Asp Asp Ile Thr Asn Gln Val Gln Gln
      35      40      45
Ala Val Gly Ala Leu Gly Leu Pro Pro Leu Glu Asp Glu Asn Ala Gln
      50      55      60
Gly Glu Asp Pro Ala Ser Gln Val Pro Pro Val Thr Asp Glu Asp Pro
      65      70      75      80
Thr Ala Phe Phe Asp Gln Val Pro Asp Val Pro Leu
      85      90

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<210> 1633

<211> 259

<212> DNA

<213> Homo sapiens

<400> 1633

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120
ggattgttag gtggatttac gacttattcc gccctcacgg tggaaaccgg ccaacgtgtg
180
atgtcagggc agtggttatg gggattgcc tatcttttga cgagtgtcgt ggcaggtgca
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259

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<210> 1634

<211> 86

<212> PRT

<213> Homo sapiens

<400> 1634

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Xaa Gly Thr Leu Ala Ile Asn Leu Val Gly Ala Phe Val Leu Ala Thr
  1      5      10      15
Leu Leu Glu Leu Leu Val His Ala Gly Pro Gly Pro Gly Val Arg Arg
      20      25      30
Ala Val Arg Leu Cys Ile Gly Thr Gly Leu Leu Gly Gly Phe Thr Thr
      35      40      45
Tyr Ser Ala Leu Thr Val Glu Thr Gly Gln Arg Val Met Ser Gly Gln
      50      55      60
Trp Leu Trp Gly Ile Ala Tyr Leu Leu Thr Ser Val Val Ala Gly Ala
      65      70      75      80
Leu Leu Ala Trp Val Met
      85

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<210> 1635

<211> 792

<212> DNA

<213> Homo sapiens

<400> 1635

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nngtcctttt ttatgaaccg gcggactcgg ttggcgttgt ggggcagggg gtgggtggagc
60

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 420
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<210> 1636

<211> 243

<212> PRT

<213> Homo sapiens

<400> 1636

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Glu	Ala	Val	Arg	Arg	Glu	Leu	Arg	Glu	Phe	Leu	Asp	Lys	Cys	Ala	Gly
				20				25					30		
Ser	Lys	Ala	Ile	Val	Trp	Asp	Glu	Tyr	Leu	Thr	Gly	Pro	Phe	Gly	Leu
				35				40					45		
Ile	Ala	Gln	Tyr	Ser	Leu	Leu	Lys	Glu	His	Glu	Val	Glu	Lys	Met	Phe
				50				55					60		
Thr	Leu	Lys	Gly	Asn	Arg	Leu	Pro	Ala	Ala	Asp	Val	Lys	Asn	Ile	Ile
Phe	Phe	Val	Arg	Pro	Arg	Leu	Glu	Leu	Met	Asp	Ile	Ile	Ala	Glu	Asn
				85					90					95	
Val	Leu	Ser	Glu	Asp	Arg	Arg	Gly	Pro	Thr	Arg	Asp	Phe	His	Ile	Leu
				100				105					110		
Phe	Val	Pro	Arg	Arg	Ser	Leu	Leu	Cys	Glu	Gln	Arg	Leu	Lys	Asp	Leu
				115				120					125		
Gly	Val	Leu	Gly	Ser	Phe	Ile	His	Arg	Glu	Glu	Tyr	Ser	Leu	Asp	Leu
				130				135					140		
Ile	Pro	Phe	Asp	Gly	Asp	Leu	Leu	Ser	Met	Glu	Ser	Glu	Gly	Ala	Phe
Lys	Glu	Cys	Tyr	Leu	Glu	Gly	Asp	Gln	Thr	Ser	Leu	Tyr	His	Ala	Ala

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<210> 1637
<211> 357
<212> DNA
<213> Homo sapiens
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120
cgcggtgaca gctgcggcat cctcggcgcc tccgggtccg gcaagagcac cctgctcaat
180
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240
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357
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<210> 1638
<211> 119
<212> PRT
<213> Homo sapiens
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<400> 1638
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Gly Ile Gly Lys Arg Tyr Gln Leu Ala Gly Gln Lys Leu Ser Ile Leu
 20          25          30
Asn Asp Val Cys Leu Ser Ile Ser Arg Gly Asp Ser Cys Gly Ile Leu
 35          40          45
Gly Ala Ser Gly Ser Gly Lys Ser Thr Leu Leu Asn Ile Leu Gly Leu
 50          55          60
Leu Asp Leu Pro Asn Ser Gly Gln Tyr His Phe Ala Gly His Asp Ile
 65          70          75          80
Leu Ala Leu Thr Pro Asp Glu Leu Ser Ala Ile Arg Asn Ser Xaa Xaa
 85          90          95
Met Val Val Phe Gln Ser Phe Asn Leu Leu Pro Arg Leu Ser Ala Leu
 100         105         110
Asp Asn Val Ala Leu Pro Leu
 115

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<210> 1639
 <211> 396
 <212> DNA
 <213> Homo sapiens

<400> 1639
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 240
 cgctttgtaa catcggtatga ggcttgggat atgatgactt ctaagacgac tgcgttgttt
 300
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 360
 aaagtagtca ttgatcatca tagacgtggc gaaact
 396

<210> 1640
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 1640
 Thr Arg Val Arg Ala Arg Val Ile Ser His Ala Leu Lys Asp Ile Leu
 1 5 10 15
 Thr Glu Gly Asp Lys Val Ile Val Met Gly His Lys Arg Pro Asp Leu
 20 25 30
 Asp Ala Ile Gly Ala Ala Ile Gly Val Ser Arg Phe Ala Ser Met Asn
 35 40 45
 Asn Leu Glu Ala Phe Ile Val Leu Asn Asp Ser Asp Ile Asp Pro Thr
 50 55 60
 Leu Arg Arg Val Met Asp Glu Ile Asp Lys Lys Pro Glu Leu Lys Glu
 65 70 75 80
 Arg Phe Val Thr Ser Asp Glu Ala Trp Asp Met Met Thr Ser Lys Thr
 85 90 95
 Thr Val Val Val Val Asp Thr His Lys Pro Glu Met Val Leu Asp Glu
 100 105 110
 Asn Val Leu Asn Lys Ala Asn Arg Lys Val Val Ile Asp His His Arg
 115 120 125
 Arg Gly Glu Thr
 130

<210> 1641
 <211> 376
 <212> DNA
 <213> Homo sapiens

<400> 1641
 ttatcagcaa acgacagcag acaagagctc ctggggctct ggggaaatgc tgctgcctgc
 60

tggccaaacg aactgatgga tgggctcttg gagtgggaga gactgggcag aagctgtgtg
 120
 ggggtgggtga ctcccaacct aaagaaccca ctgagacata tgtggcttcc ctcttccacc
 180
 ttcattgcct ctttccgtct agatgctggc aaggggggac ttggtggaca aagagagcta
 240
 ctattcattc aggagctatg ttacaccagt cactttacat gtgccacttg ctctgggtta
 300
 aactgtgcct cccctcactc atatgttgaa gtcctaacc taactacctc agaatgggac
 360
 gttatttga aaaaag
 376

<210> 1642

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1642

Met Asp Gly Leu Leu Glu Trp Glu Arg Leu Gly Arg Ser Cys Val Gly
 1 5 10 15
 Trp Val Thr Pro Asn Leu Lys Asn Pro Leu Arg His Met Trp Leu Pro
 20 25 30
 Ser Ser Thr Phe Ile Ala Ser Phe Arg Leu Asp Ala Gly Lys Gly Gly
 35 40 45
 Leu Gly Gly Gln Arg Glu Leu Phe Ile Gln Glu Leu Cys Tyr Thr
 50 55 60
 Ser His Phe Thr Cys Ala Thr Cys Ser Gly Leu Asn Cys Ala Ser Pro
 65 70 75 80
 His Ser Tyr Val Glu Val Leu Thr Leu Thr Thr Ser Glu Trp Asp Val
 85 90 95
 Ile Trp Lys Lys
 100

<210> 1643

<211> 494

<212> DNA

<213> Homo sapiens

<400> 1643

aagcttccag aattccatag gaaccagct gcccttctgg tacctcagtg aggtggagcc
 60
 gagtgtctga gagcaggtgc aggagaaggt gtgggtcca cctgggcctc tgaagccagg
 120
 ggccagaatc cccagatcta ggtccaagag ggggtccat gacctccca tgctgctcct
 180
 ctgcttgat ccaggatata agaaaggagg ggcacacact gtgggggaac tctgggggtcc
 240
 cctgtgtgca tcagcgagtc ccgggtctgc cccaccagga tgcaaagggc ctggctgctc
 300
 cagcccatg ctcacagccc tataagtgca cgatggcacc ctatatcatc taagcggggc
 360
 tgtgcctcct gaggettttag ggacaccaga atgagcccc ctcggcggag tctggctctg
 420

ggtgtgtgga gatgccacct gggacgggaa ccccaggtgc atggagcccc actgcagaca
 480
 ccatcccccg tgtg
 494

<210> 1644
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1644
 Met Gly Leu Glu Gln Pro Gly Pro Leu His Pro Gly Gly Ala Asp Pro
 1 5 10 15
 Gly Leu Ala Asp Ala His Arg Gly Pro Gln Ser Ser Pro Thr Val Cys
 20 25 30
 Ala Pro Pro Phe Leu Tyr Pro Gly Ser Lys Gln Arg Ser Ser Met Gly
 35 40 45
 Arg Ser Trp Ser Pro Leu Leu Asp Leu Asp Leu Gly Ile Leu Ala Pro
 50 55 60
 Gly Phe Arg Gly Pro Gly Gly Ala His Thr Phe Ser Cys Thr Cys Ser
 65 70 75 80
 Gln Thr Leu Gly Ser Thr Ser Leu Arg Tyr Gln Lys Gly Ser Trp Val
 85 90 95
 Pro Met Glu Phe Trp Lys Leu
 100

<210> 1645
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1645
 nnagatctgt cggataatgg ctttggtccc gacatggtga cactggtgct tgccatcggg
 60
 aggagccggg ctctgaaaca cgtggccctt ggaaggaact tcaacgttcg gtgcaaggag
 120
 accctggacg atgtcctgca tcggatagcc cagctaatagc aggatgacga ctgtcctttg
 180
 cagtcactat ccgtggctga gtcgcgggtg aagcaggggtg ccagcaccct gatccgggct
 240
 ttgggcacca atcctaaact gacagcgctg gatatcagtg gcaatgccat aggggatgct
 300
 ggggccaaga tgctagccaa ggctctacgc
 330

<210> 1646
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1646
 Xaa Asp Leu Ser Asp Asn Gly Phe Gly Ser Asp Met Val Thr Leu Val
 1 5 10 15
 Leu Ala Ile Gly Arg Ser Arg Ser Leu Lys His Val Ala Leu Gly Arg


```

<400> 1648
Met Asn Gly Gly Asn Glu Ser Ser Gly Ala Asp Arg Ala Gly Gly Pro
 1          5          10          15
Val Ala Thr Ser Val Pro Ile Gly Trp Gln Arg Cys Val Arg Glu Gly
      20          25          30
Ala Val Leu Tyr Ile Ser Pro Ser Gly Thr Glu Leu Ser Ser Leu Glu
      35          40          45
Gln Thr Arg Ser Tyr Leu Leu Ser Asp Gly Thr Cys Lys Cys Gly Leu
      50          55          60
Glu Cys Pro Leu Asn Val Pro Lys Val Phe Asn Phe Asp Pro Leu Ala
65          70          75          80
Pro Val Thr Pro

```

<210> 1649
 <211> 441
 <212> DNA
 <213> Homo sapiens

<400> 1649
 gcgtcggcag ctgaacgggt gctactggca atcggcgaac ccgaactgct ggatacgtcc
 60
 accaactcac ggttgtcgcg catcttctcc aacaagggtga tccggcgcta tccggccttt
 120
 gaagacttcc acgggatgga agaatgcac gatcagatcg ttctgtattt ccgccacgcc
 180
 gcccaaggcc tggaagagaa gaaacagatc ctttacctgc tcggccccgt cggcggcggt
 240
 aaatcgcccc tggccgaaaa gctgaaacag ctgatcgaga aggtccccct ctacgccatc
 300
 aagggtcgc cggctcttca gtcgccccctg ggggtgttca acgccactga agacggcgcg
 360
 atcctcgagg aagacttcgg gattccacgg cgttacctga acaccatcat gtcgccctgg
 420
 gcgaccaagc gcctggccga a
 441

<210> 1650
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 1650
 Ala Ser Ala Ala Glu Arg Val Leu Leu Ala Ile Gly Glu Pro Glu Leu
 1 5 10 15
 Leu Asp Thr Ser Thr Asn Ser Arg Leu Ser Arg Ile Phe Ser Asn Lys
 20 25 30
 Val Ile Arg Arg Tyr Pro Ala Phe Glu Asp Phe His Gly Met Glu Glu
 35 40 45
 Cys Ile Asp Gln Ile Val Ser Tyr Phe Arg His Ala Ala Gln Gly Leu
 50 55 60
 Glu Glu Lys Lys Gln Ile Leu Tyr Leu Leu Gly Pro Val Gly Gly Gly
 65 70 75 80
 Lys Ser Ser Leu Ala Glu Lys Leu Lys Gln Leu Ile Glu Lys Val Pro
 85 90 95
 Phe Tyr Ala Ile Lys Gly Ser Pro Val Phe Glu Ser Pro Leu Gly Leu
 100 105 110
 Phe Asn Ala Thr Glu Asp Gly Ala Ile Leu Glu Glu Asp Phe Gly Ile
 115 120 125
 Pro Arg Arg Tyr Leu Asn Thr Ile Met Ser Pro Trp Ala Thr Lys Arg
 130 135 140
 Leu Ala Glu
 145

<210> 1651
 <211> 408

<212> DNA

<213> Homo sapiens

<400> 1651

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nccgcggatc cctccggcat cctgggtatc gctccctcga aggaatccgg agccccgactg
60
cgccgcgagc tttccgaacg cctcgaggat tacgccgcac aaacttccat ggtgcgttcc
120
gtacactccc tcgcattcgc gttgctgcgc acagcggccg aggaggagct gcgccttatt
180
accggtgcgg acnaagacgc cgttatccgc gagctgctca cgggccaagc agaagacgga
240
catggctcgt ggcccgcgga gatgcgcccc gcgtggaatn natgtgggct ttcgcggcag
300
ctgcgcgatt tccttttgcg ttccattgaa cgcggcctgg gaccgggtga cctagagagc
360
ctcggtgccg agcacggccg ccccatgtgg tctgcggcgg gtgaattc
408

```

<210> 1652

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1652

```

Xaa Ala Asp Pro Ser Gly Ile Leu Val Ile Ala Pro Ser Lys Glu Ser
 1           5           10          15
Gly Ala Arg Leu Arg Arg Glu Leu Ser Glu Arg Leu Glu Asp Tyr Ala
          20          25          30
Ala Gln Thr Ser Met Val Arg Ser Val His Ser Leu Ala Phe Ala Leu
          35          40          45
Leu Arg Thr Ala Ala Glu Glu Leu Arg Leu Ile Thr Gly Ala Asp
          50          55          60
Xaa Asp Ala Val Ile Arg Glu Leu Leu Thr Gly Gln Ala Glu Asp Gly
65          70          75          80
His Gly Ser Trp Pro Ala Glu Met Arg Pro Ala Trp Asn Xaa Cys Gly
          85          90          95
Leu Ser Arg Gln Leu Arg Asp Phe Leu Leu Arg Ser Ile Glu Arg Gly
          100         105         110
Leu Gly Pro Gly Asp Leu Glu Ser Leu Gly Ala Glu His Gly Arg Pro
          115         120         125
Met Trp Ser Ala Ala Gly Glu Phe
          130         135

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<210> 1653

<211> 398

<212> DNA

<213> Homo sapiens

<400> 1653

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ccagcctctc tccgaccgcg tccttcttcc ggccatacgg cacccaatgt cgcgtcacca
60
tcacccgcgc acatggccat cgctccaccg gacgagttga gtgacaagat ccggtgcatt
120

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ctgcgcaccc ttgaacctgg tgacagtgtg aaggagattc tcaacacgtc gcgtgtcgtc
 180
 ggcattgacg tccagagcag cctgcttatt gctgggtgctc agcatctgta cttgttggac
 240
 gattacttcc agcgtccgaa cgggtgaaatc gtcaatgtct gggaagctcc gccacacgag
 300
 cgcgatgcct tgatcgtggc ggccgggtgc gcacaggtgg cacaagcag cacacccgtg
 360
 cagatatggc gctgggaaca gctccgactt tgtctaga
 398

<210> 1654

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1654

Pro	Ala	Ser	Leu	Arg	Pro	Arg	Pro	Ser	Ser	Gly	His	Thr	Ala	Pro	Asn
1				5				10						15	
Val	Ala	Ser	Pro	Ser	Pro	Ala	His	Met	Ala	Ile	Ala	Pro	Pro	Asp	Glu
			20					25					30		
Leu	Ser	Asp	Lys	Ile	Arg	Cys	Ile	Leu	Arg	Thr	Leu	Glu	Pro	Gly	Asp
		35				40					45				
Ser	Val	Lys	Glu	Ile	Leu	Asn	Thr	Ser	Arg	Val	Val	Gly	Ile	Asp	Val
	50					55				60					
Gln	Ser	Ser	Leu	Leu	Ile	Ala	Gly	Ala	Gln	His	Leu	Tyr	Leu	Leu	Asp
65					70				75					80	
Asp	Tyr	Phe	Gln	Arg	Pro	Asn	Gly	Glu	Ile	Val	Asn	Val	Trp	Glu	Ala
			85					90					95		
Pro	Pro	His	Glu	Arg	Asp	Ala	Leu	Ile	Val	Ala	Ala	Gly	Val	Ala	Gln
		100						105					110		
Val	Ala	Gln	Ser	Ser	Thr	Pro	Val	Gln	Ile	Trp	Arg	Trp	Glu	Gln	Leu
		115					120						125		
Arg	Leu	Cys	Leu												
			130												

<210> 1655

<211> 1115

<212> DNA

<213> Homo sapiens

<400> 1655

nccctgacct gacctgtcct cgccatggcc gagggccgct ccggcgccgg gggcacgtcc
 60
 ctggagggcg agcgtggcaa gagggccccc cgggagggcg agcctgcagc cccggcgctcc
 120
 ggagttcttg ataagctttt cggaaagcgg ctccctgcagg ctggctgcta cctgggtgtcc
 180
 cacaaggcgt ggatgaagac ggtgcctaca gagaactgcg acgtgctgat gaccttccca
 240
 gacacgaccg atgaccacac gctgctatgg ctgctgaacc acatccgctg gggcattccc
 300
 gagctcatcg tgcaagtccg ccaccaccgc cacacgcgtg cctacgcctt ctttgtcacc
 360

gccacgtatg agagcctact ccgagggggc gacgagctgg gtctgcgcaa agcagtgaag
 420
 gccgagtttg gcggggggcac ccgcggcttc tcctgcgagg aggactttat ctatgagaat
 480
 gtggagagcg agctacgctt cttcacctcc caggaacgcc agagcatcat ccgcttctgg
 540
 ctgcagaatt tgcgtgccaa gcagggagaa gcactccaca acgtgcgctt cctggaggac
 600
 cagccaatca tcccggagct ggcagcacgt gggatcatcc agcaggtggt ccctgtccac
 660
 gagcagcgta ttctgaaccg cctcatgaag tcatgggtgc aggccgtgtg tgaaccag
 720
 cctctagatg acatctgtga ttactttggt gtgaaaattg ccatgtactt cgctggctg
 780
 ggcttctaca cgtcggctat ggtataccca gctgtcttcg ggtctgtcct gtacacattc
 840
 acagaggctg atcagacaag ccgggatggt tcctgcgtgg tctttgcctt cttcaacgtg
 900
 atctggctga cgctgttctt ataggaatgg aagcgtatag gggctgagct gggatataat
 960
 tgggggacgc tggactcatc ctgggaagcc gtggaggagc cacgccccca gttcaggtgc
 1020
 gtgcgacgta tcatcccat cactcgggcc gaggagttct actaccgcc ctggaagcgg
 1080
 ctgctcttcc agctgcttgt tagcctccgc ctgtg
 1115

<210> 1656

<211> 299

<212> PRT

<213> Homo sapiens

<400> 1656

Met	Ala	Glu	Ala	Ala	Ser	Gly	Ala	Gly	Gly	Thr	Ser	Leu	Glu	Gly	Glu
1				5					10					15	
Arg	Gly	Lys	Arg	Pro	Pro	Pro	Glu	Gly	Glu	Pro	Ala	Ala	Pro	Ala	Ser
			20					25					30		
Gly	Val	Leu	Asp	Lys	Leu	Phe	Gly	Lys	Arg	Leu	Leu	Gln	Ala	Gly	Arg
			35				40					45			
Tyr	Leu	Val	Ser	His	Lys	Ala	Trp	Met	Lys	Thr	Val	Pro	Thr	Glu	Asn
	50				55						60				
Cys	Asp	Val	Leu	Met	Thr	Phe	Pro	Asp	Thr	Thr	Asp	Asp	His	Thr	Leu
65					70				75						80
Leu	Trp	Leu	Leu	Asn	His	Ile	Arg	Val	Gly	Ile	Pro	Glu	Leu	Ile	Val
				85					90					95	
Gln	Val	Arg	His	His	Arg	His	Thr	Arg	Ala	Tyr	Ala	Phe	Phe	Val	Thr
			100					105					110		
Ala	Thr	Tyr	Glu	Ser	Leu	Leu	Arg	Gly	Ala	Asp	Glu	Leu	Gly	Leu	Arg
			115				120					125			
Lys	Ala	Val	Lys	Ala	Glu	Phe	Gly	Gly	Gly	Thr	Arg	Gly	Phe	Ser	Cys
	130					135						140			
Glu	Glu	Asp	Phe	Ile	Tyr	Glu	Asn	Val	Glu	Ser	Glu	Leu	Arg	Phe	Phe
145					150					155					160
Thr	Ser	Gln	Glu	Arg	Gln	Ser	Ile	Ile	Arg	Phe	Trp	Leu	Gln	Asn	Leu

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                165                170                175
Arg Ala Lys Gln Gly Glu Ala Leu His Asn Val Arg Phe Leu Glu Asp
                180                185                190
Gln Pro Ile Ile Pro Glu Leu Ala Ala Arg Gly Ile Ile Gln Gln Val
                195                200                205
Phe Pro Val His Glu Gln Arg Ile Leu Asn Arg Leu Met Lys Ser Trp
                210                215                220
Val Gln Ala Val Cys Glu Asn Gln Pro Leu Asp Asp Ile Cys Asp Tyr
225                230                235                240
Phe Gly Val Lys Ile Ala Met Tyr Phe Ala Trp Leu Gly Phe Tyr Thr
                245                250                255
Ser Ala Met Val Tyr Pro Ala Val Phe Gly Ser Val Leu Tyr Thr Phe
                260                265                270
Thr Glu Ala Asp Gln Thr Ser Arg Asp Val Ser Cys Val Val Phe Ala
                275                280                285
Leu Phe Asn Val Ile Trp Ser Thr Leu Phe Leu
                290                295

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<210> 1657
 <211> 333
 <212> DNA
 <213> Homo sapiens

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<400> 1657
tgtagaggct cgaggatc cggaccatgt ggtccaggac gccccgtcc tccgggcccc
60
gcacggagac gcggcgctcag cacggacagc acgcagtctg tgagcctctg caggcagttc
120
ttggagccccg cgggcttccc gcgccgttc agggggcggg cggcagctcg ggccggtact
180
tctcccaaaa ctgctccggg caggggcgct ccagcagcct ctgcatgaga cggacggcat
240
ccacgcggcc cgtgtaagtg gccactcct gcggcgacat tccacggcgg gggtagcctc
300
gcgtggacat ccgccctgc tagcatcagg gct
333

```

<210> 1658
 <211> 108
 <212> PRT
 <213> Homo sapiens

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<400> 1658
Met Leu Ala Gly Ala Asp Val His Ala Arg Val Pro Pro Pro Trp Asn
1      5      10      15
Val Ala Ala Gly Val Gly His Leu His Gly Pro Arg Gly Cys Arg Pro
20     25     30
Ser His Ala Glu Ala Ala Gly Ala Pro Leu Pro Gly Ala Val Leu Gly
35     40     45
Glu Val Pro Ala Arg Ala Ala Ala Arg Pro Leu Lys Arg Arg Gly Lys
50     55     60
Pro Ala Gly Ser Lys Asn Cys Leu Gln Arg Leu Thr Asp Cys Val Leu
65     70     75     80
Ser Val Leu Thr Pro Arg Leu Arg Ala Gly Pro Gly Gly Arg Gly Arg

```

85 90 95
 Pro Gly Pro His Gly Pro Asp Asp Leu Glu Pro Leu
 100 105

<210> 1659
 <211> 382
 <212> DNA
 <213> Homo sapiens

<400> 1659
 nnaagcttat ttgttattac taatattttc cgtgaccaga tgggcccgtc tggtgagatt
 60
 tacacaactt acaagatgat tttggatgct attcgtaagg tgcctactgc cactgttctc
 120
 cttaatggag acagtccact tttctacaag ccagctattc caaatcctgt acagtatttt
 180
 gggttttgact tggagaaagg cccagcccaa ctggctcact ataataccga aggaattctc
 240
 tgtcccgaact gccaaaggcat cctcaaatat gagcataata cctatgcaaa cttgggccc
 300
 tatatctgtg aagactgtgg atgtaaacgt cctgatctcg actatcgctt gacagaactg
 360
 gttgagttaa ccaacaatcg cn
 382

<210> 1660
 <211> 127
 <212> PRT
 <213> Homo sapiens

<400> 1660
 Xaa Ser Leu Phe Val Ile Thr Asn Ile Phe Arg Asp Gln Met Gly Arg
 1 5 10 15
 Tyr Gly Glu Ile Tyr Thr Thr Tyr Lys Met Ile Leu Asp Ala Ile Arg
 20 25 30
 Lys Val Pro Thr Ala Thr Val Leu Leu Asn Gly Asp Ser Pro Leu Phe
 35 40 45
 Tyr Lys Pro Ala Ile Pro Asn Pro Val Gln Tyr Phe Gly Phe Asp Leu
 50 55 60
 Glu Lys Gly Pro Ala Gln Leu Ala His Tyr Asn Thr Glu Gly Ile Leu
 65 70 75 80
 Cys Pro Asp Cys Gln Gly Ile Leu Lys Tyr Glu His Asn Thr Tyr Ala
 85 90 95
 Asn Leu Gly Ala Tyr Ile Cys Glu Asp Cys Gly Cys Lys Arg Pro Asp
 100 105 110
 Leu Asp Tyr Arg Leu Thr Glu Leu Val Glu Leu Thr Asn Asn Arg
 115 120 125

<210> 1661
 <211> 524
 <212> DNA
 <213> Homo sapiens

<400> 1661

acgcgtcgat gatcatggag aagacgcggg ccggctcctt gcctgtgacc ttcttgtaca
60
gctgcgggta gtagagctcc aggctctcga ggaaggccac gtagcccttg tggccgggtcc
120
gctgcaggat gtccaggagc acaccactt tccgtttgcg gatgaccagg ttgggggtcgc
180
tgagcacctg ctctcatca tcagggttca ggaccttgca ctgccgcagg taagggtgtga
240
tgcgtgaggg gtcgatgacc gaggtgagcg tcaccggaa gccctccagg acgttccagc
300
actcgtcacc gttctcgtag tccgacatgg cctcagcagg caggctgggg agtgtggggc
360
agtgtgaga gcgatgccgg ctctgcccc caccggggc cagctccac tccttctcag
420
acgtggggc agggctctcg tcagggcacc gagggggatc agcccaggcg catccaggag
480
aggtgccag ctccgtgtcc catccacgc ttgatcgctg catg
524

<210> 1662

<211> 174

<212> PRT

<213> Homo sapiens

<400> 1662

Met	Gln	Arg	Ser	Ser	Val	Gly	Trp	Asp	Thr	Glu	Leu	Gly	Thr	Ser	Pro
1				5					10					15	
Gly	Cys	Ala	Trp	Ala	Asp	Pro	Pro	Arg	Cys	Pro	Asp	Glu	Ser	Pro	Gly
			20					25					30		
Pro	Ala	Ser	Glu	Lys	Glu	Trp	Glu	Leu	Gly	Pro	Gly	Gly	Gly	Arg	Ser
			35					40					45		
Arg	His	Arg	Ser	Gln	His	Cys	Pro	Thr	Leu	Pro	Ser	Leu	Pro	Ala	Glu
			50			55					60				
Ala	Met	Ser	Asp	Tyr	Glu	Asn	Asp	Asp	Glu	Cys	Trp	Asn	Val	Leu	Glu
65					70				75					80	
Gly	Phe	Arg	Val	Thr	Leu	Thr	Ser	Val	Ile	Asp	Pro	Ser	Arg	Ile	Thr
			85					90					95		
Pro	Tyr	Leu	Arg	Gln	Cys	Lys	Val	Leu	Asn	Pro	Asp	Asp	Glu	Glu	Gln
			100					105					110		
Val	Leu	Ser	Asp	Pro	Asn	Leu	Val	Ile	Arg	Lys	Arg	Lys	Val	Gly	Val
			115					120					125		
Leu	Leu	Asp	Ile	Leu	Gln	Arg	Thr	Gly	His	Lys	Gly	Tyr	Val	Ala	Phe
			130			135					140				
Leu	Glu	Ser	Leu	Glu	Leu	Tyr	Tyr	Pro	Gln	Leu	Tyr	Lys	Lys	Val	Thr
145					150					155				160	
Gly	Lys	Glu	Pro	Ala	Arg	Val	Phe	Ser	Met	Ile	Ile	Asp	Ala		
					165					170					

<210> 1663

<211> 321

<212> DNA

<213> Homo sapiens

<400> 1663

nnagtacttg tcatgattac gcctagtttg ggtatctatt tctctcagcg ttctcagatc
 60
 tcccgaaccc aagacgacga ggctcggaca cgcgcttcta tctcgaccct tcaagacgag
 120
 gtcaagaggt ggcacgatcc cgactacgtc cgtgctcagg cgcgctccca gctcggctgg
 180
 gtgatgccgg gcgaaactgg gtatcaggtc attggagaaa acggttaaggt cattggatcg
 240
 acgacttctt tggacgaaaa agatccggcg agtgaagcca gcgctgacgc tcggtggtgg
 300
 caagaggctt gcggatcagt c
 321

<210> 1664

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1664

Xaa Val Leu Val Met Ile Thr Pro Ser Leu Gly Ile Tyr Phe Ser Gln
 1 5 10 15
 Arg Ser Gln Ile Ser Arg Thr Gln Asp Asp Glu Ala Arg Thr Arg Ala
 20 25 30
 Ser Ile Ser Thr Leu Gln Asp Glu Val Lys Arg Trp His Asp Pro Asp
 35 40 45
 Tyr Val Arg Ala Gln Ala Arg Ser Gln Leu Gly Trp Val Met Pro Gly
 50 55 60
 Glu Thr Gly Tyr Gln Val Ile Gly Glu Asn Gly Lys Val Ile Gly Ser
 65 70 75 80
 Thr Thr Ser Leu Asp Glu Lys Asp Pro Ala Ser Glu Ala Ser Ala Asp
 85 90 95
 Ala Arg Trp Trp Gln Glu Ala Cys Gly Ser Val
 100 105

<210> 1665

<211> 431

<212> DNA

<213> Homo sapiens

<400> 1665

gcttccgaac tcatcaagaa gctcaagagg tataaaatgg ttttgcgctc taccggcggc
 60
 ggcccgaacta tctccggtgg tgaagtactc atgcaacgcg cttttgcgtg gaacttgctc
 120
 atgagtgcta agtcgatggg cattcatacc tgtatcgata cctccggttt tttgggggct
 180
 gcggcaacag atgacttttt agagtctggt gatttggtgt tgctcgacgt caaatcggga
 240
 gatgaagaaa tctaccgtgc cctcaccggc agagcgttgc aacctaccat cgattttggt
 300
 gatcgtctca ccgcgctcgg taaagaaatc tggattcggt tcgttggtgg ccccgatac
 360
 accgactcgg tagagaacgt ggaaaaggtt gccgatatcg tccgcagatg gcgcaccgct
 420

gtttcacgcg t
431

<210> 1666
<211> 143
<212> PRT
<213> Homo sapiens

<400> 1666
Ala Ser Glu Leu Ile Lys Lys Leu Lys Arg Tyr Lys Met Val Leu Arg
1 5 10 15
Ser Thr Gly Gly Gly Pro Thr Ile Ser Gly Gly Glu Val Leu Met Gln
20 25 30
Arg Ala Phe Ala Trp Asn Leu Leu Met Ser Ala Lys Ser Met Gly Ile
35 40 45
His Thr Cys Ile Asp Thr Ser Gly Phe Leu Gly Ala Ala Thr Asp
50 55 60
Asp Phe Leu Glu Ser Val Asp Leu Val Leu Leu Asp Val Lys Ser Gly
65 70 75 80
Asp Glu Glu Ile Tyr Arg Ala Leu Thr Gly Arg Ala Leu Gln Pro Thr
85 90 95
Ile Asp Phe Gly Asp Arg Leu Thr Ala Leu Gly Lys Glu Ile Trp Ile
100 105 110
Arg Phe Val Val Val Pro Gly Tyr Thr Asp Ser Val Glu Asn Val Glu
115 120 125
Lys Val Ala Asp Ile Val Arg Arg Trp Arg Thr Ala Val Ser Arg
130 135 140

<210> 1667
<211> 370
<212> DNA
<213> Homo sapiens

<400> 1667
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gttgagtcta ctgaggcccg tggcttggac aagatcgcca agatcgactg ggatccgcac
120
accaccagtg gcatcatgtc gaaggcagct gctgagatcg ctgagcgcgc cgaggccaag
180
ttcatcgctg cctttaccaa gtccggtgac accgcccgtc gtatcgctcg tctgcgtccg
240
agcaccgccg tcatcgtttt cacctctgat gagaccacga ccaagaccct cgccctgggtc
300
tggggcgctc acgccgtcgt taccgccgtg tttaagaatg cggaggagct gtaccgctgg
360
gttaacgcgt
370

<210> 1668
<211> 123
<212> PRT
<213> Homo sapiens

<400> 1668

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Ser Ala Glu Thr Ser Val Gly Asp Phe Pro Gly Glu Thr Val Arg Thr
 1           5           10           15
Met Ala Lys Ile Val Glu Ser Thr Glu Ala Arg Gly Leu Asp Lys Ile
 20           25           30
Ala Lys Ile Asp Trp Asp Pro His Thr Thr Ser Gly Ile Met Ser Lys
 35           40           45
Ala Ala Ala Glu Ile Ala Glu Arg Ala Glu Ala Lys Phe Ile Val Ala
 50           55           60
Phe Thr Lys Ser Gly Asp Thr Ala Arg Arg Ile Ala Arg Leu Arg Pro
 65           70           75           80
Ser Thr Pro Leu Ile Val Phe Thr Ser Asp Glu Thr Thr Thr Lys Thr
 85           90           95
Leu Ala Trp Val Trp Gly Ala His Ala Val Val Thr Pro Val Phe Lys
100           105           110
Asn Ala Glu Glu Leu Tyr Arg Trp Val Asn Ala
115           120

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<210> 1669

<211> 1491

<212> DNA

<213> Homo sapiens

<400> 1669

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cgaaaactcc acccccttct caaacgagtt attcctagct ccgccccag tccttgcttc
120
tcccagcctt ggtggtaatt agcttgaaag tgggaacgag agtgcggtcc gcaaagaaag
180
gacttctggt tagacactga aatacaaaaca gactgccaac gagctctggg caaagctgcc
240
ccgtcttctt ttttcgaaag accctcaaaa actgccttct cttctgctac caaaacttgg
300
gccctagaaa gtggctgcgg agtggagcag atggacatca ctgagaatgg tagaggaggg
360
gctgtgtttt ctgaggggga gtcattggcag cttgtgctgg gggccaggaa gggaaaaaac
420
caatctggca ttcaggttgt ggaaggcaaa gtgaaacaag aagtcatttg ggaaaatatt
480
atattataaa cacatagaat aatatgtaca cgctcatata catcccaaag agaagcctca
540
aggagtcccg tttcttctca aaagaaactt cactatgata aagcattcct atagtgggaa
600
ttaactacaa tgaataaatt taacaatttc atttatgcta tatctgtgtc cactacagag
660
tctacggtga aggctgtgtg gagcgagtgt gtctagtggc ctggaacacc aacgcgttct
720
tcaaaaatag gcaatgacct gtttttttct attcacattt acaatagcta cacagtgatg
780
aaacgcagac tgaaaaatca aatggcagga cgatggaact gtcgtcaagg ttctcagact
840
tgtggcttct gcacctgtta tacttttggg tacgagtggc ctccacttag cttcgttaag
900

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attagaaatt tccatgaaac acttaccac atataaattc tgtgtaaagc tttatttttt
 960
 tccccaccta ctttaatttt ttttaaaaag tgaaataaga ggaaaaactc ttataaaata
 1020
 taagggttaa catacgagag agcgaggaac accccggagg ctgccggtgc gtgtggcttc
 1080
 atgtttctgt gctacatgag tctagtgtcc tcatcttcca ttgtgacaac ctttctcccc
 1140
 ccatacact gtcaatgagc tctaggcaaa gctgccccgt ttgcttttaa cctaagggat
 1200
 gctgtggttt ggttgactac atttgactac caccactgaa ggcggcggac gtctgaagcg
 1260
 gctggatacc gcaacgatgg aaaatcaggc gaggtactag cgtggagggc cgggctgcca
 1320
 ggtcaaggtc gtctgggttc tcaggagcca gtctgtgcca cagaaccatc ggcagctgcc
 1380
 ttcgtaaggc acctcgtct ggcattcgga aaaccacccc atcttgccag agtccttgg
 1440
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 1491

<210> 1670

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1670

Met	Pro	Asp	Trp	Phe	Phe	Pro	Phe	Leu	Ala	Pro	Ser	Thr	Ser	Cys	His
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Asp	Ser	Pro	Ser	Glu	Asn	Thr	Ala	Pro	Pro	Leu	Pro	Phe	Ser	Val	Met
			20					25				30			
Ser	Ile	Cys	Ser	Thr	Pro	Gln	Pro	Leu	Ser	Arg	Ala	Gln	Val	Leu	Val
		35				40					45				
Ala	Glu	Gly	Lys	Ala	Val	Phe	Glu	Gly	Leu	Ser	Lys	Lys	Glu	Asp	Gly
	50					55					60				
Ala	Ala	Leu	Pro	Arg	Ala	Arg	Trp	Gln	Ser	Val	Cys	Ile	Ser	Val	Ser
65				70				75				80			
Asn	Gln	Lys	Ser	Phe	Leu	Cys	Gly	Pro	His	Ser	Arg	Ser	His	Phe	Gln
			85					90				95			
Ala	Asn	Tyr	His	Gln	Gly	Trp	Glu	Arg	Gln	Gly	Leu	Gly	Ala	Glu	Leu
			100				105					110			
Gly	Ile	Thr	Arg	Leu	Arg	Arg	Gly	Trp	Ser	Phe	Arg	Cys	Ser	Phe	Pro
		115					120					125			
Cys	Ser	Val	Leu												
			130												

<210> 1671

<211> 432

<212> DNA

<213> Homo sapiens

<400> 1671

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tcgcgacgaa ggaagcccat ggctgaaacc acatcgccgg cacagcggaa acccacggcg
 120
 gcaccccgca tgaagccggt gtcgcgggtc ggggacacga ttttcgctgg cgcctcgctc
 180
 gttattgcca tagccctggc cgtcatcgtc atcctgatgt tcgtcttctt catgaagacg
 240
 gcagccccga cgttggtggc taacaccgat aactttttca cgtcccgggc ttggacaacg
 300
 gatcagaacc cgccggcctt tggatatccag gccctgctat ggacgacagt catctcatcc
 360
 ctgcttgccc tgctcatcgc agtgccgctc tcggtgggca tcgctctgtt tatcaccacg
 420
 ctgcaccta gg
 432

<210> 1672

<211> 144

<212> PRT

<213> Homo sapiens

<400> 1672

Ala	Arg	Arg	Gly	Gly	Arg	Thr	Pro	Val	Val	Phe	Pro	Pro	Leu	Thr	Thr
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Thr	Arg	Pro	Leu	Ser	Arg	Arg	Arg	Lys	Pro	Met	Ala	Glu	Thr	Thr	Ser
			20					25					30		
Pro	Ala	Gln	Arg	Lys	Pro	Thr	Ala	Ala	Ser	Arg	Met	Lys	Pro	Val	Ser
		35					40					45			
Arg	Val	Gly	Asp	Thr	Ile	Phe	Ala	Gly	Ala	Ser	Ser	Val	Ile	Ala	Ile
	50					55				60					
Ala	Leu	Ala	Val	Ile	Val	Ile	Leu	Met	Phe	Val	Phe	Leu	Met	Lys	Thr
65					70					75				80	
Ala	Ala	Pro	Thr	Leu	Leu	Ala	Asn	Thr	Asp	Asn	Phe	Phe	Thr	Ser	Arg
			85						90					95	
Ala	Trp	Thr	Thr	Asp	Gln	Asn	Pro	Pro	Ala	Phe	Gly	Ile	Gln	Ala	Leu
			100					105					110		
Leu	Trp	Thr	Thr	Val	Ile	Ser	Ser	Leu	Leu	Ala	Leu	Leu	Ile	Ala	Val
		115					120					125			
Pro	Leu	Ser	Val	Gly	Ile	Ala	Leu	Phe	Ile	Thr	Gln	Leu	Ala	Pro	Arg
	130						135					140			

<210> 1673

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1673

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 gacctggcag tgaagctgct gatgaatgca cgacaaagac cagtttgctc cgtaacccca
 120
 ggctcccagc gtcttttcca tgagccaaag gcctggctct ggaggggggt gccctgcagc
 180
 tctgctggcc ttcttccagg ggagttcatt gctgggggtg gccctgcagg gacctccact
 240

gtgctgggga ggggaagaag aaggatgcaa cagggggagg ggagaatttg agaaaatagg
 300
 atgcaaattc tccacttggtg aataaagaaa tagagagcca ttgctaagaa ctatgtttac
 360
 gcagggttag tgctgggacc cagaaccagt caactggttt t
 401

<210> 1674

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1674

Met Ala Leu Tyr Phe Phe Ile His Lys Trp Arg Ile Cys Ile Leu Phe
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 Ser Gln Ile Leu Pro Ser Pro Cys Cys Ile Leu Leu Leu Pro Leu Pro
 20 25 30
 Ser Thr Val Glu Val Pro Ala Gly Pro Pro Pro Ala Met Asn Ser Pro
 35 40 45
 Gly Arg Arg Pro Ala Glu Leu Gln Gly Thr Pro Leu Gln Asp Gln Ala
 50 55 60
 Phe Gly Ser Trp Lys Arg Arg Trp Glu Pro Gly Val Thr Glu Gln Thr
 65 70 75 80
 Gly Leu Cys Arg Ala Phe Ile Ser Ser Phe Thr Ala Arg Ser Glu Tyr
 85 90 95
 Ile Lys Thr Gln Arg Pro Trp Gln Thr Pro Gln Arg Leu Glu Cys Ala
 100 105 110
 Arg

<210> 1675

<211> 500

<212> DNA

<213> Homo sapiens

<400> 1675

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 gcgccaaaccg cacgggcagc ctccacacgc ccctctagag cgctgctgga cagaatggct
 120
 tgattgtttg gcatgtcttc aggatacccg tttagccagg aaacaccggt aggcttgcta
 180
 ctatgcgagc agccgacgca cgggtagagg gaattccac cacagtccct cgcactccac
 240
 ccgcacacgc cctgggaacc gtcaccgcg gtaccaccgg gtcaatcggc tccgaaaatg
 300
 cgaccgctgg atgtgccacc accccgcnc a tccgcagtgc gctccgtaac gccgtctgca
 360
 acaccgtccc ctccgtatct gccgacacct gtgccaacac ttgtaccgat gcatgcaccg
 420
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 480
 ctgttgagat ggctacgcgt
 500

<210> 1676
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 1676
 Arg Glu Phe Pro Pro Gln Ser Leu Ala Leu His Pro His Thr Pro Trp
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 Glu Pro Ser Pro Ala Val Pro Pro Gly Gln Ser Ala Pro Gln Met Arg
 20 25 30
 Pro Leu Asp Val Pro Pro Pro Arg Xaa Ser Ala Val Arg Ser Val Thr
 35 40 45
 Pro Ser Ala Thr Pro Ser Pro Pro Tyr Leu Pro Thr Pro Val Pro Thr
 50 55 60
 Leu Val Pro Met His Ala Pro Met Gln Gln Gln Ala Leu Arg Ser Leu
 65 70 75 80
 Ser Ile Trp Asp Thr Ala Pro Pro Pro Gly Pro Leu Leu Arg Trp Leu
 85 90 95
 Arg

<210> 1677
 <211> 631
 <212> DNA
 <213> Homo sapiens

<400> 1677
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 gatttgccgc gtacgggtgc ttctactggg tgtttngac tggaatgggc cncggggag
 120
 cagcaggatg ttgtgaccgc cgtggaatgg gcggcggtac agccgtgggc gaatggtcgg
 180
 gtggggcttt tcggtaaatc ctacgatggg gggacggggg cttattgctg caggtaatca
 240
 gccgcggggg ttggctgctg tgggtggcga ggagccagct atggagccct acacttacct
 300
 gtataacaat gaggtccttt actacaacgc tattggtacg agcctttctt atgatgagat
 360
 tgctgcctcc cccggccgtg tccttcacga cactcccgaa tatatgaaga acagtgtcta
 420
 cgaggtggcc caccgcatt gcctgtccga caatttgcgt aattcttttag accccatccg
 480
 tagccacaaa taatgggcgg gatcggcttt tcctcacca agacgcataa tttccccggt
 540
 gcccttgttt atttccgctg gccttattga ggacaatacg gagcctgatg gtttgggtgga
 600
 attgttgaag gaccgtaagg ctccgacgcg t
 631

<210> 1678
 <211> 78
 <212> PRT

<213> Homo sapiens

<400> 1678

Xaa His Asp Phe Leu Asn Asp Ala Lys Val Met Glu Ala Gly Tyr Thr
 1 5 10 15
 Trp Val Gln Val Asp Leu Arg Gly Thr Gly Ala Ser Thr Gly Cys Leu
 20 25 30
 Xaa Leu Glu Trp Ser Xaa Gly Glu Gln Gln Asp Val Val Thr Ala Val
 35 40 45
 Glu Trp Ala Ala Val Gln Pro Trp Ser Asn Gly Arg Val Gly Leu Phe
 50 55 60
 Gly Lys Ser Tyr Asp Gly Gly Thr Gly Ser Tyr Cys Cys Arg
 65 70 75

<210> 1679

<211> 531

<212> DNA

<213> Homo sapiens

<400> 1679

nctacttaga gcaaaggtag gaaaagaagg cagctaggcg tggtctcat tccttccac
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 agaatggatt ataagtcgag cctgatccag gatgggaatc ccatggagaa cttggagaag
 120
 cagctgatct gccctatctg cctggagatg ttaccaagc cagtggcat cttgccgtgc
 180
 cagcacaacc tgtgccgga gtgtgccaat gacatcttcc aggtgcgaaa tccctactgg
 240
 accagccggg gcagctcagt gtccatgtct ggaggccgtt tccgctgcc tacctgccgc
 300
 caccaggtga tcatggatcg tcacggagtgc tacggcctgc agaggaacct gctggtggag
 360
 aacatcatcg acatctacaa acaggagtgc tccagtcggc cgctgcagaa gggcagtcac
 420
 cccatgtaca aggagcacga agatgagaaa atcaacatct actgtctcac gtgtgaggtg
 480
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 531

<210> 1680

<211> 143

<212> PRT

<213> Homo sapiens

<400> 1680

Met Glu Asn Leu Glu Lys Gln Leu Ile Cys Pro Ile Cys Leu Glu Met
 1 5 10 15
 Phe Thr Lys Pro Val Val Ile Leu Pro Cys Gln His Asn Leu Cys Arg
 20 25 30
 Lys Cys Ala Asn Asp Ile Phe Gln Ala Ala Asn Pro Tyr Trp Thr Ser
 35 40 45
 Arg Gly Ser Ser Val Ser Met Ser Gly Gly Arg Phe Arg Cys Pro Thr
 50 55 60
 Cys Arg His Glu Val Ile Met Asp Arg His Gly Val Tyr Gly Leu Gln


```

65          70          75          80
Arg Asn Leu Leu Val Glu Asn Ile Ile Asp Ile Tyr Lys Gln Glu Cys
          85          90          95
Ser Ser Arg Pro Leu Gln Lys Gly Ser His Pro Met Tyr Lys Glu His
          100          105          110
Glu Asp Glu Lys Ile Asn Ile Tyr Cys Leu Thr Cys Glu Val Pro Thr
          115          120          125
Cys Ser Met Cys Lys Val Phe Gly Ile His Lys Ala Cys Glu Val
          130          135          140

```

<210> 1681
 <211> 396
 <212> DNA
 <213> Homo sapiens

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<400> 1681
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120
tgtgaggtct gcagcaagat gttctaccgc aaggacgtca tgctggacca ccagcgccgg
180
cacnctggaa ggagtgcggc gagtgaagcg nnagaggacc tggaggccgg tggggagaac
240
ctggtccggtt acaagaagga gccttcgggg tgcccgtgtg gtggcaaggt gttctcctgc
300
cggagcaata tgaacaagca cctgctcacc cacggcgaca agaagtacac ctgcgagatc
360
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396

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<210> 1682
 <211> 132
 <212> PRT
 <213> Homo sapiens

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<400> 1682
Glu Phe His Asn Cys Arg Thr Asp Asp Lys Thr Phe Gln Cys Glu Met
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Cys Phe Arg Phe Phe Ser Thr Asn Ser Asn Leu Ser Lys His Lys Lys
          20          25          30
Lys His Gly Asp Lys Lys Phe Ala Cys Glu Val Cys Ser Lys Met Phe
          35          40          45
Tyr Arg Lys Asp Val Met Leu Asp His Gln Arg Arg His Xaa Gly Arg
          50          55          60
Ser Ala Ala Ser Glu Ala Xaa Glu Asp Leu Glu Ala Gly Gly Glu Asn
65          70          75          80
Leu Val Arg Tyr Lys Lys Glu Pro Ser Gly Cys Pro Val Cys Gly Lys
          85          90          95
Val Phe Ser Cys Arg Ser Asn Met Asn Lys His Leu Leu Thr His Gly
          100          105          110
Asp Lys Lys Tyr Thr Cys Glu Ile Cys Gly Arg Lys Phe Phe Arg Val
          115          120          125
Asp Val Leu Arg

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130

<210> 1683

<211> 676

<212> DNA

<213> Homo sapiens

<400> 1683

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nncggccgga caggtcccgga gcagccccgc ccaacatgga cccagacccc caggcgggcg
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tgcaggtggg catgcgggtg gtgcgcggcg tggaccggaa gtggggccag caggacggcg
120
gcgagggcgcg cgtgggcacg gtggtggagc ttggccgcca cggcagcccc tcgacacccg
180
accgcacagt ggtcgtgcag tgggaccagg gcacgcgcac caactaccgc gccggtacc
240
agggcgcgca cgacctgctg ctgtacgaca acgccagat cggcgtccgg caccccaaca
300
tcattctgtga ctgctgcaag aagcacgggc tgcgggggat gcgctggaag tgccgtgtgt
360
gcctggacta cgacctctgc acgcagtgtc acatgcacaa caagcatgag ctgcgccacg
420
ccttcgaccg ctacgagacc gctcactcgc gccctgtcac actgagtccc cgccagggcc
480
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600
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660
aaaccggggc gccgga
676

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<210> 1684

<211> 154

<212> PRT

<213> Homo sapiens

<400> 1684

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Xaa Gly Arg Thr Gly Pro Glu Gln Pro Arg Pro Thr Trp Thr Gln Thr
1           5           10           15
Pro Arg Arg Ala Cys Arg Trp Ala Cys Gly Trp Cys Ala Ala Trp Thr
20           25           30
Gly Ser Gly Ala Ser Arg Thr Ala Ala Arg Ala Ala Trp Ala Arg Trp
35           40           45
Trp Ser Leu Ala Ala Thr Ala Ala Pro Arg His Pro Thr Ala Gln Trp
50           55           60
Ser Cys Ser Gly Thr Arg Ala Arg Ala Pro Thr Thr Ala Pro Ala Thr
65           70           75           80
Arg Ala Arg Thr Thr Cys Cys Cys Thr Thr Thr Pro Arg Ser Ala Ser
85           90           95
Gly Thr Pro Thr Ser Ser Val Thr Ala Ala Arg Ser Thr Gly Cys Gly
100          105          110
Gly Cys Ala Gly Ser Ala Val Cys Ala Trp Thr Thr Thr Ser Ala Arg

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115 120 125
 Ser Ala Thr Cys Thr Thr Ser Met Ser Ser Pro Thr Pro Ser Thr Ala
 130 135 140
 Thr Arg Pro Leu Thr Arg Ala Leu Ser His
 145 150

<210> 1685
 <211> 2740
 <212> DNA
 <213> Homo sapiens

<400> 1685
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 120
 ggggcctccc ctctccatc ctctcttct gcgggcaaaa cccaggaac cggcagcaga
 180
 aactccggaa gcggcggtgc ggggggcggc agcgggtggtg gagggagcta ctggaaagaa
 240
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 300
 gcggccgcgg ctccagatgca cgctaagaac ggcgggcgca gcagtagccg cagctccccg
 360
 gtgtctggcc cccctgccgt ttgcgagacc ctggccgtcg cctccgcctc cccaatggcg
 420
 gcggcggcgg agggcccca gcagagcgca gagggcagcg cgagcggcgg gggcatgcag
 480
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 660
 caggaaatgc gccacgagtt ggagagagcc aacaaaaact gccggatcct gcagtaccgc
 720
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 780
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 840
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 960
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 1080
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 1200
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 1260

ctggtggagg aagaagccaa catcctgggc aggaaaatcg tcgaactgga ggtggagaac
1320
agaggcctga aggcggaact ggacgacctt aggggcgatg acnnttcaac ggctcggcca
1380
accgctcat gaggnagca gagcgaatcc ctgtcggagc tgcggcagca cctgcagctg
1440
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1500
cgcatcacgg cggagctcaa caagtacaag tacaagnntc cggcggccac gacagcgcg
1560
ggcaccacga caacgccana gaccgaggcc ctgcaggagg agctgaaggc ggcgcgcctg
1620
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1680
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1740
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1800
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1860
gctgcctcan cgcctactcg ctcttctac ccggcgcccg ggccctggcc caagagcttc
1920
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1980
gaccggctca tcgccgacac gagcaccatc atcaccgagg cgcgcacnt acgtggccaa
2040
cggggacctg ttncggact catggacgag gaggacgacg gcagccgcat ccgggagcac
2100
gagctgctct accgcatcaa cgctcagatg aaggccttcc gcaaggagct gcagaccttc
2160
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2220
gtgagtcaga tgttccagcc tatcatttta cttatttca ttctgtatt attttcatca
2280
ctttcttaca caacaatatt taaacttgc ttcttttta cactgtttt tgtactgtaa
2340
atctttcatc atttaccatt cattgtagta ttttcagttt gtttattttg ttcaccttc
2400
aagacaagaa gtaaaagaag tataatttct gtagtaacca atgctataaa aacactgaag
2460
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2520
ccaaacacta aaatatttca ggtaagaaag tgtgacattt ttctgtatga attgttttaa
2580
tttttacttc ttttttcat cctgtttgct tctcttgat aaataattgg catactgaat
2640
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2700
gctggacgga cattcacaat ttggtcacat ttccaaaaag
2740

<210> 1686

<211> 463

<212> PRT

<213> Homo sapiens

<400> 1686

Xaa Gly Gly Ala Gly Gly Gly Ser Gly Glu Arg Glu Gly Gly Ala Pro
 1 5 10 15
 Gln Pro Pro Pro Pro Arg Gly Trp Arg Gly Lys Gly Val Arg Ala Gln
 20 25 30
 Gln Arg Gly Gly Ser Gly Gly Glu Gly Ala Ser Pro Ser Pro Ser Ser
 35 40 45
 Ser Ser Ala Gly Lys Thr Pro Gly Thr Gly Ser Arg Asn Ser Gly Ser
 50 55 60
 Gly Val Ala Gly Gly Gly Ser Gly Gly Gly Gly Ser Tyr Trp Lys Glu
 65 70 75 80
 Gly Cys Leu Gln Ser Glu Leu Ile Gln Phe His Leu Lys Lys Glu Arg
 85 90 95
 Ala Ala Ala Ala Ala Ala Ala Ala Ala Gln Met His Ala Lys Asn Gly Gly
 100 105 110
 Gly Ser Ser Ser Arg Ser Ser Pro Val Ser Gly Pro Pro Ala Val Cys
 115 120 125
 Glu Thr Leu Ala Val Ala Ser Ala Ser Pro Met Ala Ala Ala Glu
 130 135 140
 Gly Pro Gln Gln Ser Ala Glu Gly Ser Ala Ser Gly Gly Gly Met Gln
 145 150 155 160
 Ala Ala Ala Pro Pro Ser Ser Gln Pro His Pro Gln Gln Leu Gln Glu
 165 170 175
 Gln Glu Glu Met Gln Glu Glu Met Glu Lys Leu Arg Glu Glu Asn Glu
 180 185 190
 Thr Leu Lys Asn Glu Ile Asp Glu Leu Arg Thr Glu Met Asp Glu Met
 195 200 205
 Arg Asp Thr Phe Phe Glu Glu Asp Ala Cys Gln Leu Gln Glu Met Arg
 210 215 220
 His Glu Leu Glu Arg Ala Asn Lys Asn Cys Arg Ile Leu Gln Tyr Arg
 225 230 235 240
 Leu Arg Lys Ala Glu Arg Lys Arg Leu Arg Tyr Ala Gln Thr Gly Glu
 245 250 255
 Ile Asp Gly Glu Leu Leu Arg Ser Leu Glu Gln Asp Leu Lys Val Ala
 260 265 270
 Lys Asp Val Ser Val Arg Leu His His Glu Leu Glu Asn Val Glu Glu
 275 280 285
 Lys Arg Thr Thr Thr Glu Asp Glu Asn Glu Lys Leu Arg Gln Gln Leu
 290 295 300
 Ile Glu Val Glu Ile Ala Lys Gln Ala Leu Gln Asn Glu Leu Glu Lys
 305 310 315 320
 Met Lys Glu Leu Ser Leu Lys Arg Arg Gly Ser Lys Asp Leu Pro Lys
 325 330 335
 Ser Glu Lys Lys Ala Gln Gln Thr Pro Thr Glu Glu Asp Asn Glu Asp
 340 345 350
 Leu Lys Cys Gln Leu Gln Phe Val Lys Glu Glu Ala Ala Leu Met Arg
 355 360 365
 Lys Lys Met Ala Lys Ile Asp Lys Glu Lys Asp Arg Phe Glu His Glu
 370 375 380
 Leu Gln Lys Tyr Arg Ser Phe Tyr Gly Asp Leu Asp Ser Pro Leu Pro
 385 390 395 400
 Lys Gly Glu Ala Gly Gly Pro Pro Ser Thr Arg Glu Ala Glu Leu Lys

```

                405                410                415
Leu Arg Leu Arg Leu Val Glu Glu Glu Ala Asn Ile Leu Gly Arg Lys
                420                425                430
Ile Val Glu Leu Glu Val Glu Asn Arg Gly Leu Lys Ala Glu Leu Asp
                435                440                445
Asp Leu Arg Gly Asp Asp Xaa Ser Thr Ala Arg Pro Thr Arg Ser
                450                455                460

```

<210> 1687
 <211> 326
 <212> DNA
 <213> Homo sapiens

```

<400> 1687
gtgcacacag gtgagcgtcc ctacaagtgt ccacactgcg actatgcagg taccagtcg
60
ggctcgctca agtatcacct tcagcgtcac caccgagagc agaagaacag tgcgggttcc
120
tgggcctccc ccagaacccc cgccaccttc ccagcggggc tctctgcagc cgcagtcagg
180
agccaagcca actcaggcct cagccacctg ggtagagggc actgcaagta cccggcctcc
240
ttcgagcagc accggaccag ggtcccgtag gaagcctgct agccctggga ggaccctgcg
300
aaacggcgat gtggtgaagc cgaact
326

```

<210> 1688
 <211> 89
 <212> PRT
 <213> Homo sapiens

```

<400> 1688
Val His Thr Gly Glu Arg Pro Tyr Lys Cys Pro His Cys Asp Tyr Ala
1      5      10      15
Gly Thr Gln Ser Gly Ser Leu Lys Tyr His Leu Gln Arg His His Arg
20     25     30
Glu Gln Lys Asn Ser Ala Gly Ser Trp Ala Ser Pro Arg Thr Pro Ala
35     40     45
Thr Phe Pro Ala Gly Leu Thr Ala Ala Ala Val Arg Ser Gln Ala Asn
50     55     60
Ser Gly Leu Ser His Leu Gly Arg Gly His Cys Lys Tyr Pro Ala Ser
65     70     75     80
Phe Glu Gln His Arg Thr Arg Val Pro
85

```

<210> 1689
 <211> 301
 <212> DNA
 <213> Homo sapiens

```

<400> 1689
nggggaagcc atggctgctt aaggacaatg cactgtcagc tcggtgatgt cttgatttgg
60

```

tctgggattc tgcacttagt aattgcagat aatactcatg tggcgccaag gaaaaaaaaa
 120
 ttggcctttt cccagtccat taagcctaaa caaaccacat cactttacat caggcagatc
 180
 atgtggtacc agaattttcc agtttggcgg actatcttga tcaaataaac taaattattg
 240
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 300

a
 301

<210> 1690
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 1690
 Met His Cys Gln Leu Gly Asp Val Leu Ile Trp Ser Gly Ile Leu His
 1 5 10 15
 Leu Val Ile Ala Asp Asn Thr His Val Ala Pro Arg Lys Lys Lys Leu
 20 25 30
 Ala Phe Ser Gln Ser Ile Lys Pro Lys Gln Thr Thr Ser Leu Tyr Ile
 35 40 45
 Arg Gln Ile Met Trp Tyr Gln Asn Phe Pro Val Trp Arg Thr Ile Leu
 50 55 60
 Ile Lys Ser Thr Lys Leu Leu Pro Leu Trp Leu Ser Val Lys Glu His
 65 70 75 80
 Asn Glu Glu Asn Leu Glu Pro Tyr Leu Ile Leu
 85 90

<210> 1691
 <211> 483
 <212> DNA
 <213> Homo sapiens

<400> 1691
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 60
 ttgtgccttg aagtgtggga ccgcggcccc ggcattcctc aagacaaaca aaagtcattc
 120
 ttcgaagaat tcaaacgcct ggacagtcac cagaccgcg ccgagaaagg cctgggcctg
 180
 ggccctggcg ttgccgacgg cttgtgccgc gtgctcgggc atcgcttgag cgtgcgttcg
 240
 tggccgggca agggcagcgt gttcagcgtg cgcgtgccgt tggcgcgcac ccaggtcagc
 300
 gcgcctgccca agccggcgca ggaaagcggc cagccgttga gtggcgcgca ggtgctgtgt
 360
 gtgaataaca aagaaagcat cctgatcggc atgcgcagct tgctcccgcg ctggggctgc
 420
 gaagtctggc ccgcgcgcga ccaggcgcaa tgtgccgcgc tgttggtgta ggggtgtgcg
 480
 ccg
 483

<210> 1692
 <211> 161
 <212> PRT
 <213> Homo sapiens

<400> 1692
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 1 5 10 15
 Arg Arg Gly Glu Leu Cys Leu Glu Val Trp Asp Arg Gly Pro Gly Ile
 20 25 30
 Pro Gln Asp Lys Gln Lys Ser Phe Phe Glu Glu Phe Lys Arg Leu Asp
 35 40 45
 Ser His Gln Thr Arg Ala Glu Lys Gly Leu Gly Leu Gly Leu Ala Ile
 50 55 60
 Ala Asp Gly Leu Cys Arg Val Leu Gly His Arg Leu Ser Val Arg Ser
 65 70 75 80
 Trp Pro Gly Lys Gly Ser Val Phe Ser Val Arg Val Pro Leu Ala Arg
 85 90 95
 Thr Gln Val Ser Ala Pro Ala Lys Pro Ala Gln Glu Ser Gly Gln Pro
 100 105 110
 Leu Ser Gly Ala Gln Val Leu Cys Val Asn Asn Lys Glu Ser Ile Leu
 115 120 125
 Ile Gly Met Arg Ser Leu Leu Pro Arg Trp Gly Cys Glu Val Trp Pro
 130 135 140
 Ala Arg Asp Gln Ala Gln Cys Ala Ala Leu Leu Ala Glu Gly Val Arg
 145 150 155 160
 Pro

<210> 1693
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 1693
 acgcgtgttc catctgcagc cgtgcgaaaa ctctcccacc atgtcgcaga ctggatactt
 60
 cgaggattca agctactaca agtgtgacac agatgacacc ttcgaagccc gagaggagat
 120
 actggggggg atgaggcctt cgacactgcc aactcctcca tcgtgtcttg cgagagtatc
 180
 cgtttttttg tcaatgtcaa ccttgagatg caggccacca aactgagaa tgaagcgact
 240
 tccggtggct gtgtgctcct gcacacctcc cgaaaggcca gcacgtcctt gaacgagacg
 300
 gccacctccc tggataacgt gctgcggacc atg
 333

<210> 1694
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1694

```

Met Val Arg Ser Thr Leu Ser Arg Glu Val Ala Val Ser Phe Arg Thr
 1             5             10             15
Met Leu Ala Phe Arg Glu Val Cys Arg Ser Thr Gln Pro Pro Glu Val
          20             25             30
Ala Ser Phe Ser Val Leu Val Ala Cys Ile Ser Arg Leu Thr Leu Thr
      35             40             45
Lys Lys Arg Ile Leu Ser Pro Asp Thr Met Glu Glu Leu Ala Val Ser
 50             55             60
Lys Ala Ser Ser Pro Pro Val Ser Pro Leu Gly Leu Arg Arg Cys His
65             70             75             80
Leu Cys His Thr Cys Ser Ser Leu Asn Pro Arg Ser Ile Gln Ser Ala
          85             90             95
Thr Trp Trp Glu Ser Phe Arg Thr Ala Ala Asp Gly Thr Arg
      100             105             110

```

<210> 1695

<211> 485

<212> DNA

<213> Homo sapiens

<400> 1695

```

tgatcagctt tatcaggagt ttttgcaagt accgcagatt tatgttgaat cctagtaagc
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gccaggaatt tgaagactat cttcaccagg aatgcaaaa tagcaaggaa aatttcacca
120
cagcacacaa cacatcgagg cggttcagctc caccctccac aaatgtccgg agtgcagacc
180
aagagaatgg agaaataacc cttgtaaagc gtcgtatatt tggccacagg attatcactg
240
tcaactttgc gatcaatgat ctatatttct tttctgaaat ggagaaattt aatgatctgg
300
tcagttcagc ccacatgctg cagggtcaacc gggcatataa tgagaatgat gtgatoctaa
360
tgcggtccaa aatgaacatt atccaaaaac tcttcctgaa ttctgacatc cctccaaagc
420
tgagggtgaa tgtccctgag ttccagaagg atgccatcct tgctgccatc acagagggct
480
accta
485

```

<210> 1696

<211> 148

<212> PRT

<213> Homo sapiens

<400> 1696

```

Met Leu Asn Pro Ser Lys Arg Gln Glu Phe Glu Asp Tyr Leu His Gln
 1             5             10             15
Glu Met Gln Asn Ser Lys Glu Asn Phe Thr Thr Ala His Asn Thr Ser
      20             25             30
Gly Arg Ser Ala Pro Pro Ser Thr Asn Val Arg Ser Ala Asp Gln Glu
      35             40             45
Asn Gly Glu Ile Thr Leu Val Lys Arg Arg Ile Phe Gly His Arg Ile

```

```

      50              55              60
Ile Thr Val Asn Phe Ala Ile Asn Asp Leu Tyr Phe Phe Ser Glu Met
65              70              75              80
Glu Lys Phe Asn Asp Leu Val Ser Ser Ala His Met Leu Gln Val Asn
      85              90              95
Arg Ala Tyr Asn Glu Asn Asp Val Ile Leu Met Arg Ser Lys Met Asn
      100             105             110
Ile Ile Gln Lys Leu Phe Leu Asn Ser Asp Ile Pro Pro Lys Leu Arg
      115             120             125
Val Asn Val Pro Glu Phe Gln Lys Asp Ala Ile Leu Ala Ala Ile Thr
      130             135             140
Glu Gly Tyr Leu
145

```

```

<210> 1697
<211> 337
<212> DNA
<213> Homo sapiens

```

```

<400> 1697
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60
ttcccgcttc ccaggggcct gtggatggga ctccctgcga attcgactcc caggggaaaa
120
gccaaagagct gcctccttgg gacaactggg gcggcagctg tgatcgaca tggcttcagc
180
agaggcctga gcggctgcct ccgttggcca gcaggctctg agagcactcg cccggcctga
240
ctgttcaccc atcctttcac ccggaggcca gctgtggctg tctgtgctct cagaggggag
300
gcgatgggca aggcgcctgc catgcagatg ggtggtg
337

```

```

<210> 1698
<211> 107
<212> PRT
<213> Homo sapiens

```

```

<400> 1698
Met Ala Gly Ala Leu Pro Ile Ala Ser Pro Leu Arg Ala Gln Thr Ala
1              5              10              15
Thr Ala Gly Leu Arg Val Lys Gly Trp Met Asn Ser Gln Ala Gly Arg
      20              25              30
Val Leu Ser Glu Pro Ala Gly Gln Arg Arg Gln Pro Leu Arg Pro Leu
      35              40              45
Leu Lys Pro Cys Ala Ile Thr Ala Ala Ala Pro Val Val Pro Arg Arg
      50              55              60
Gln Leu Leu Ala Phe Pro Leu Gly Val Glu Phe Ala Gly Ser Pro Ile
65              70              75              80
His Arg Pro Leu Gly Gly Gly Lys Thr Ser Arg Ser Pro Lys Pro Val
      85              90              95
Thr Cys Asp Ser Pro Glu Asp Gly Gly Asn Leu
      100             105

```

<210> 1699

<211> 442

<212> DNA

<213> Homo sapiens

<400> 1699

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 aatggtgtgg tgcgcggcaa gcgcacgaa cgcaccagcc tccacaaggt ttacgagaag
 120
 ggcattaacc tgctgcctc tctatttgcc ctggatatca atggctcaac ggtggaaagc
 180
 accggcctgg gtctggacat cggatgatgct gaccgaatct gttatccaat ccccgacacc
 240
 ctgtgcaatg aaccctggca aaagcgccca accgcgcaac tgctgatgac catgcacgaa
 300
 cttgaagggg aacctttttt cgccgatcct cgcgaagtac tccgccaagt tgtaagcaaa
 360
 tttgacgacc tcggtctgac catctgcgcc gcattcgagc tggagttcta cctgattgac
 420
 caggagaacg tgaatggccg gc
 442

<210> 1700

<211> 147

<212> PRT

<213> Homo sapiens

<400> 1700

Xaa	Ala	Phe	Leu	Lys	Asp	His	Pro	Glu	Val	Leu	Tyr	Val	Asp	Leu	Leu
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Ile	Ala	Asp	Met	Asn	Gly	Val	Val	Arg	Gly	Lys	Arg	Ile	Glu	Arg	Thr
			20					25					30		
Ser	Leu	His	Lys	Val	Tyr	Glu	Lys	Gly	Ile	Asn	Leu	Pro	Ala	Ser	Leu
		35					40				45				
Phe	Ala	Leu	Asp	Ile	Asn	Gly	Ser	Thr	Val	Glu	Ser	Thr	Gly	Leu	Gly
	50					55					60				
Leu	Asp	Ile	Gly	Asp	Ala	Asp	Arg	Ile	Cys	Tyr	Pro	Ile	Pro	Asp	Thr
65				70					75					80	
Leu	Cys	Asn	Glu	Pro	Trp	Gln	Lys	Arg	Pro	Thr	Ala	Gln	Leu	Leu	Met
			85					90					95		
Thr	Met	His	Glu	Leu	Glu	Gly	Glu	Pro	Phe	Phe	Ala	Asp	Pro	Arg	Glu
		100						105					110		
Val	Leu	Arg	Gln	Val	Val	Ser	Lys	Phe	Asp	Asp	Leu	Gly	Leu	Thr	Ile
		115					120					125			
Cys	Ala	Ala	Phe	Glu	Leu	Glu	Phe	Tyr	Leu	Ile	Asp	Gln	Glu	Asn	Val
	130						135					140			
Asn	Gly	Arg													
145															

<210> 1701

<211> 8265

<212> DNA

<213> Homo sapiens

<400> 1701
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gggcccggcg gcgggggcgca gagccaggca gcgcaggat agccaggctg gagaaaagaa
120
gctgccacca tgggtgcact ttcactgaag atcagcattg ggaatgtggt gaagacgatg
180
cagtttgagc cgtctaccat ggtgtacgac gcctgccgca tcattcgtga gcggatccca
240
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300
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360
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420
aagacgatca tgggtggatga ctctaagact gtcactgaca tgctcatgac catctgtgcc
480
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540
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600
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720
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960
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Gly	Lys	Ala	Leu	Asp	Tyr	Tyr	Met	Leu	Arg	Asn	Gly	Asp	Thr	Met	Glu
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Tyr	Arg	Lys	Lys	Gln	Arg	Pro	Leu	Lys	Ile	Arg	Met	Leu	Asp	Gly	Thr
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Leu	Lys	Lys	Asp	Lys	Thr	Leu	Leu	Arg	Asp	Glu	Lys	Lys	Met	Glu	Lys
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Leu	Lys	Gln	Lys	Leu	His	Thr	Asp	Asp	Glu	Leu	Asn	Trp	Leu	Asp	His
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Gly	Arg	Thr	Leu	Arg	Glu	Gln	Gly	Val	Glu	Glu	His	Glu	Thr	Leu	Leu
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Gly Glu Gln Ile Ala Gln Leu Ile Ala Gly Tyr Ile Asp Ile Ile Leu
385          390          395          400
Lys Lys Lys Lys Ser Lys Asp His Phe Gly Leu Glu Gly Asp Glu Glu
          405          410          415
Ser Thr Met Leu Glu Asp Ser Val Ser Pro Lys Lys Ser Thr Val Leu
          420          425          430
Gln Gln Gln Tyr Asn Arg Val Gly Lys Val Glu His Gly Ser Val Ala
          435          440          445
Leu Pro Ala Ile Met Arg Ser Gly Ala Ser Gly Pro Glu Asn Phe Gln
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Val Gly Ser Met Pro Pro Ala Gln Gln Gln Ile Thr Ser Gly Gln Met
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His Arg Gly His Met Pro Pro Leu Thr Ser Ala Gln Gln Ala Leu Thr
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Gly Thr Ile Asn Ser Ser Met Gln Ala Val Gln Ala Ala Gln Ala Thr
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Leu Asp Asp Phe Asp Thr Leu Pro Pro Leu Gly Gln Asp Ala Ala Ser
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Lys Ala Trp Arg Lys Asn Lys Met Asp Glu Ser Lys His Glu Ile His
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Lys Ala Val Ala Ser Ala Ala Ala Leu Val Leu Lys Ala Lys Ser
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Ala Ala Thr Gln Cys Ala Leu Ser Thr Ser Gln Leu Val Ala Cys Thr
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Lys Val Val Ala Pro Thr Ile Ser Ser Pro Val Cys Gln Glu Gln Leu
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Pro Asp Ser Pro Ser Ala Gln Leu Ala Leu Ile Ala Ala Ser Gln Ser		
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 120
 tctgtcttac ctttctccat gactgtgtcc tggctgtcc tagccttgct ctgatccaca
 180
 ctgagctggc cttgagcagg gtcgcacctg tacatgaaga caatggctgg tttctcactg
 240
 gactctcctt tcgcctctgt gaaccagtga tggcgctgaa ctggaggaag aggcagcatg
 300
 tgaatgactg tgccatccat ggccaccaag ttccctttct ctgct
 346

<210> 1704
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1704
 Met Asp Gly Thr Val Ile His Met Leu Pro Leu Pro Pro Val Gln Arg
 1 5 10 15
 His His Trp Phe Thr Glu Ala Lys Gly Glu Ser Ser Glu Lys Pro Ala
 20 25 30
 Ile Val Phe Met Tyr Arg Cys Asp Pro Ala Gln Gly Gln Leu Ser Val
 35 40 45
 Asp Gln Ser Lys Ala Arg Thr Asp Gln Ala Ala Val Met Glu Lys Gly
 50 55 60
 Arg Ala Glu Asn Ala Leu Leu Gln Asp Ser Glu Lys Lys Arg Ser His
 65 70 75 80
 Ser Ser Pro Ser Gln Ile Pro Lys Lys Ile Leu Ser His Met Thr His
 85 90 95
 Glu Val Thr Glu Asp Phe Ser Pro Arg Asp
 100 105

<210> 1705
 <211> 377
 <212> DNA
 <213> Homo sapiens

<400> 1705

gtgcaccttt tctcaggact cgctcagaag gtccttctgg gaggacaatg gacaagacta
60
aaccatcaaa tccattctca atgggtcaaa ttccaaattt tcctgaaggg ctgggttcta
120
ctggtgctcc aatcgagttg cagaaaggta taaggggtgg agcaagtta tttaatcctg
180
gttttggtg gaacaaaaat ccacaagttc aaaccttgaa gaattctcaa ggttctattc
240
ataatttagt gaggtctgga gttactgttg aaaggaaagt taatgtaggg gcacaaggag
300
cttttaactc tgcccctgca ccacagatgg aatttcccac agttcctcca tacaaccctc
360
cttccttcgg agctagc
377

<210> 1706

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1706

Met	Asp	Lys	Thr	Lys	Pro	Ser	Asn	Pro	Phe	Ser	Met	Gly	Gln	Ile	Pro
1				5					10					15	
Asn	Phe	Pro	Glu	Gly	Leu	Ala	Ser	Thr	Gly	Ala	Pro	Ile	Glu	Leu	Gln
			20					25					30		
Lys	Gly	Ile	Gln	Gly	Gly	Ala	Ser	Leu	Phe	Asn	Pro	Gly	Phe	Gly	Trp
			35				40					45			
Asn	Gln	Asn	Pro	Gln	Val	Gln	Thr	Leu	Lys	Asn	Ser	Gln	Gly	Ser	Ile
			50			55					60				
His	Asn	Leu	Val	Arg	Ser	Gly	Val	Thr	Val	Glu	Arg	Lys	Val	Asn	Val
65					70					75				80	
Gly	Ala	Gln	Gly	Ala	Phe	Asn	Ser	Ala	Pro	Ala	Pro	Gln	Met	Glu	Phe
				85					90					95	
Pro	Thr	Val	Pro	Pro	Tyr	Asn	Pro	Ser	Ser	Phe	Gly	Ala	Ser		
			100					105						110	

<210> 1707

<211> 427

<212> DNA

<213> Homo sapiens

<400> 1707

nnttcggtga acccgaagcc cggacgcagc gccgataccc atgtgcgccc agtactacgc
60
catcacgccca agcgagtgcct catcatcggg gccgggctag ccggcatgga ggctgcgcga
120
gttctcagcg aacgcgcaca cgaacctctc atcgctcagg ccagcgacca cattggcgga
180
gtcatccttg cgggtggtca accttctctc aaggaggacg acctagctct gctggagtgg
240
taccgcacca ccctggagga gttgggcgtg gagattcgac tcaacaccac cgtaacggct
300

gatcttatcg cttccttcgg ggccgatcac gtcgtcctgg cgaccggatc gaggcgcgt
 360
 cgactcgacc taggtgatga tgccaaggtc attgacgcca ccgacgctct gctcaaccgc
 420
 gacgcgt
 427

<210> 1708
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 1708
 Xaa Ser Val Asn Pro Lys Pro Gly Arg Ser Ala Asp Thr His Val Arg
 1 5 10 15
 Pro Val Leu Arg His His Ala Lys Arg Val Leu Ile Ile Gly Ala Gly
 20 25 30
 Leu Ala Gly Met Glu Ala Ala Arg Val Leu Ser Glu Arg Ala His Glu
 35 40 45
 Pro Leu Ile Val Glu Ala Ser Asp His Ile Gly Gly Val Ile Leu Ala
 50 55 60
 Gly Gly Gln Pro Ser Phe Lys Glu Asp Asp Leu Ala Leu Leu Glu Trp
 65 70 75 80
 Tyr Arg Thr Thr Leu Glu Glu Leu Gly Val Glu Ile Arg Leu Asn Thr
 85 90 95
 Thr Val Thr Ala Asp Leu Ile Ala Ser Phe Gly Ala Asp His Val Val
 100 105 110
 Leu Ala Thr Gly Ser Arg Pro Arg Arg Leu Asp Leu Gly Asp Asp Ala
 115 120 125
 Lys Val Ile Asp Ala Thr Asp Ala Leu Leu Asn Arg Asp Ala
 130 135 140

<210> 1709
 <211> 446
 <212> DNA
 <213> Homo sapiens

<400> 1709
 acgcgtgaag gggaccagga ggttgacac agaccattgc aatggaaatg atgatttaga
 60
 ctgttctttt ctgactgatg actgggagtc agggaagatg aatgcagagt ctgtgatcac
 120
 ctctcttcc agccacatca tatctcagcc tcctggagga aactcccata gcttgtctct
 180
 tcagtcccag ttgacagctt ctgaacgttt ccaagagaat agttcggatc attcagaaac
 240
 cagggtgttg caagaggctt tctttcaggc aatcctgctt gctgtgtgct taatcatttc
 300
 tgcattgtgca agatgggtta tgggagaaat attagccagt gtcttcacat gtcattgat
 360
 gataactgta gcttatgtga aatcattggt tctcagcctt gccagctatt tcaaaaccac
 420
 tgcctgtgct cggtttgtca aaattt
 446

<210> 1710
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 1710
 Met Asn Ala Glu Ser Val Ile Thr Ser Ser Ser Ser His Ile Ile Ser
 1 5 10 15
 Gln Pro Pro Gly Gly Asn Ser His Ser Leu Ser Leu Gln Ser Gln Leu
 20 25 30
 Thr Ala Ser Glu Arg Phe Gln Glu Asn Ser Ser Asp His Ser Glu Thr
 35 40 45
 Arg Leu Leu Gln Glu Val Phe Phe Gln Ala Ile Leu Leu Ala Val Cys
 50 55 60
 Leu Ile Ile Ser Ala Cys Ala Arg Trp Val Met Gly Glu Ile Leu Ala
 65 70 75 80
 Ser Val Phe Thr Cys Ser Leu Met Ile Thr Val Ala Tyr Val Lys Ser
 85 90 95
 Leu Phe Leu Ser Leu Ala Ser Tyr Phe Lys Thr Thr Ala Cys Ala Arg
 100 105 110
 Phe Val Lys Ile
 115

<210> 1711
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 1711
 nggggggattc atgttagtat ttgtcagaaa aggcttttga aagagccaaa ttaaaaagag
 60
 cactagaaca tgaacagga aagcagagga aatacttgta gaaagtattt ttacagctc
 120
 cctcaatata attcagtaat gttcattcct ggtgagaagt ctgtccgcac acacagcatc
 180
 agccaagcag cagaagcagt ggtgtctggg gggctgggaa gtttttcccc caaataccca
 240
 ccccatgcac tgcccagtc ccagacccca aagactttgt cctgcctca cgcacctttt
 300
 gcaggctcac actgtctgtg tgcgcaagag gtagcgacag gagacaatgg ggaaagagct
 360
 gaaggaggca aacaaggcca gggggaaaagc ctacctcgag gcacagaggg gccccaagat
 420
 ggatat
 426

<210> 1712
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1712
 Met Asn Arg Glu Ser Arg Gly Asn Thr Cys Arg Lys Tyr Phe Leu Gln

```

      1           5           10           15
Leu Pro Gln Tyr Asn Ser Val Met Phe Ile Pro Gly Glu Lys Ser Val
      20           25           30
Arg Thr His Ser Ile Ser Gln Ala Ala Glu Ala Val Val Ser Gly Gly
      35           40           45
Leu Gly Ser Phe Ser Pro Lys Tyr Pro Pro His Ala Leu Pro Ser Pro
      50           55           60
Gln Thr Pro Lys Thr Leu Ser Ser Pro His Ala Pro Phe Ala Gly Ser
      65           70           75           80
His Cys Leu Cys Ala Gln Glu Val Ala Thr Gly Asp Asn Gly Glu Arg
      85           90           95
Ala Glu Gly Gly Lys Gln Gly Gln Gly Glu Ser Leu Pro Arg Gly Thr
      100          105          110
Glu Gly Pro Gln Asp Gly Tyr
      115

```

<210> 1713

<211> 328

<212> DNA

<213> Homo sapiens

<400> 1713

```

tctagaaagg tttatttcat gggccaaggc ttgtgtttcc aaagccagga agggctgaag
60
ccagaattgg ccctggctgc ttgccacaga gtctggccgg gggaccctgg acctcagcag
120
ggtcattgat aggtcagctt tggaggagca gggccagcgt gtccctgcttt ctgctcctgg
180
aatgagcctc actccctccc tgcctcaaggc agcccttcac ccagccgccg ggacaggtgc
240
cctgtgccac ctgccatccc tgggattctc catctcagtg agtgctccct ggggcctggg
300
aacgcatctg gctggtgact cctggggg
328

```

<210> 1714

<211> 99

<212> PRT

<213> Homo sapiens

<400> 1714

```

Met Gly Gln Gly Leu Cys Phe Gln Ser Gln Glu Gly Leu Lys Pro Glu
  1           5           10           15
Leu Ala Leu Ala Ala Cys His Arg Val Trp Pro Gly Asp Pro Gly Pro
      20           25           30
Gln Gln Gly His Asp Glu Val Ser Phe Gly Gly Ala Gly Pro Ala Cys
      35           40           45
Pro Ala Phe Cys Ser Trp Asn Glu Pro His Ser Leu Pro Ala Gln Gly
      50           55           60
Ser Pro Ser Pro Ser Arg Arg Asp Arg Cys Pro Val Pro Pro Ala Ile
      65           70           75           80
Pro Gly Ile Leu His Leu Ser Glu Cys Ser Leu Gly Pro Gly Asn Ala
      85           90           95
Ser Gly Trp

```

<210> 1715
 <211> 489
 <212> DNA
 <213> Homo sapiens

<400> 1715
 gttgccagcg atgggccgca tttgtacatc ccggtatttc gtgttcggtg tgggtgtaaaa
 60
 gatgccccat gtgtgacatt ctgtggatag ttattgttag cattatttga caagttctag
 120
 aaatcgatcc acccaggcgt gtagctgcgg tatttcatca gagttgatcg ttgcgatgag
 180
 ttgatcatgg cctgtcatgg cgtagtcttc tacgtcgtaa agtatgagac aatccacggt
 240
 aatatggtgt tttttggcca actcgggaagc cggggtgtcg gggaagtcgg tccctgtaag
 300
 gtatgggcct gtcccaatga cgacgtgtgc tgggtccatg aggagttcgt ccaagggtcg
 360
 aactcattac cgtcgaatac gacgtgtgc ccatcggcgg tgcgaatcg aatcctcaaa
 420
 gtgtatccgt actcgggtgtc gcgcaacagg tgcctaacct cagcgctagt gggctgtgca
 480
 ctgacgcgt
 489

<210> 1716
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 1716
 Met Ala Cys His Gly Val Val Phe Tyr Val Val Lys Tyr Glu Thr Ile
 1 5 10 15
 His Gly Asn Met Val Phe Phe Gly Gln Leu Gly Ser Arg Gly Val Gly
 20 25 30
 Glu Val Gly Pro Cys Lys Val Trp Ala Cys Pro Asn Asp Asp Val Cys
 35 40 45
 Trp Val His Glu Glu Phe Val Gln Gly Ser Asn Ser Leu Pro Ser Asn
 50 55 60
 Thr Thr Leu Ser Pro Ser Ala Val Ser Asn Arg Ile Leu Lys Val Tyr
 65 70 75 80
 Pro Tyr Ser Val Ser Arg Asn Arg Cys Leu Thr Ser Ala Leu Val Gly
 85 90 95
 Cys Ala Leu Thr Arg
 100

<210> 1717
 <211> 312
 <212> DNA
 <213> Homo sapiens

<400> 1717

nggcatacaa cggagtaaaa accacatcaa cagaagtgga aacaggccca gagagcgtga
 60
 gaggtttctg gtttcaagaa ggcacactga gtcctgcac ccgatgcctc tccttcccc
 120
 aatcccactg gaatacacag agagacataa aaacaaggag tgcctgtag cagagcagcc
 180
 aggctggctc atgagacaga gggagcagtc ttctgggaga catggctctt gctgctgcgg
 240
 atcagccaac agatccatgg aaagcaaagg gcccttctcc ggaggcttcc tggggcctgc
 300
 catgaatgtg tc
 312

<210> 1718

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1718

Met	Ala	Gly	Pro	Arg	Lys	Pro	Pro	Glu	Lys	Gly	Pro	Leu	Leu	Ser	Met
1				5					10					15	
Asp	Leu	Leu	Ala	Asp	Pro	Gln	Gln	Gln	Glu	Pro	Cys	Leu	Pro	Glu	Asp
			20					25					30		
Cys	Ser	Leu	Cys	Leu	Met	Ser	Gln	Pro	Gly	Cys	Ser	Ala	Thr	Gly	His
		35					40					45			
Ser	Leu	Phe	Leu	Cys	Leu	Ser	Val	Tyr	Ser	Ser	Gly	Ile	Trp	Gly	Arg
	50					55					60				
Arg	Gly	Ile	Gly	Cys	Arg	Asp	Ser	Val	Cys	Leu	Leu	Glu	Thr	Arg	Asn
65					70					75				80	
Leu	Ser	Arg	Ser	Leu	Gly	Leu	Phe	Pro	Leu	Leu	Leu	Met	Trp	Phe	Leu
				85					90					95	
Leu	Arg	Cys	Met	Pro											
				100											

<210> 1719

<211> 404

<212> DNA

<213> Homo sapiens

<400> 1719

tgatcaccac ggccctgccca tttttgtcg ggaccgcaga ccgtatgctg cccctcgaag
 60
 tcagagacaa tccaaccggc ctgcaaaact gcggtcttgc ccggggcaac gtcgtagggt
 120
 ccaacagttt ctccaacctc ataggtagaa gaagtgtctat agctgctgga aatggagatg
 180
 tggatcacat cgagcagtgg gaagtcaatg cctgccgaaa ccgaccagtt cttcgtctta
 240
 gtttctgtga tggatcgctg gaccggctgc ggagtgtcgt tgagttggaa atcgtcacgt
 300
 cccagcagag ccacgaagt agctgcgcac cacatgaacg ggctgtccgt gtcacccgga
 360
 ttcgagcagg gagcacccat tggtngtgg tgtccccggg gggt
 404

<210> 1720
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 1720
 Met Gly Ala Pro Cys Ser Asn Pro Gly Asp Thr Asp Ser Pro Phe Met
 1 5 10 15
 Trp Cys Ala Ala Thr Ser Met Ala Leu Leu Gly Arg Asp Asp Phe Gln
 20 25 30
 Leu Asn Asp Thr Pro Gln Pro Val Thr Arg Ser Ile Thr Glu Thr Lys
 35 40 45
 Thr Lys Asn Trp Ser Val Ser Ala Gly Ile Asp Phe Pro Leu Leu Asp
 50 55 60
 Val Ile His Ile Ser Ile Ser Ser Ser Tyr Ser Thr Ser Ser Thr Tyr
 65 70 75 80
 Glu Val Gly Glu Thr Val Gly Pro Tyr Asp Val Ala Pro Gly Lys Thr
 85 90 95
 Ala Val Leu Gln Ala Gly Trp Ile Val Ser Asp Phe Glu Gly Gln His
 100 105 110
 Thr Val Cys Gly Pro Asp Lys Lys Trp Gln Gly Arg Gly Asp
 115 120 125

<210> 1721
 <211> 529
 <212> DNA
 <213> Homo sapiens

<400> 1721
 ccatggccac cctttcagga cagagctgcc ctccccatgc tggaggagcc acagggcctg
 60
 gtcgctgtgg cttcagcctc ccagctcctc ctgtcctctg ctgggcactt gtaatgtcca
 120
 ggcactccct gcttggatca ggggatctgg gtttcatctt cccagctcct cctgtcctct
 180
 gctgggcacc tgtgatgtcc aggcactccc tgcctggatt gggggatctg ggtttcatct
 240
 tcccagctcc tctgtcctc cgctgggcac ctgtgatgtc caggcactcc ctgcttggat
 300
 cgggggggtct gggttttgtg ctatacttgg tgctcccttt cactcaggcc ccttcttgac
 360
 tctgcagagc taccctcgc catctctttc acgcgggcct cctgcagtct ctgtgtcac
 420
 cctgtgactc tgcttcgggt gttgtcaaat gggggtcac ccaggaccg caccactggg
 480
 tcgtgtgcag gtttctgggg tggcagagtg cggatgagtg ggcacgcgt
 529

<210> 1722
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 1722

```

Met Ala Thr Leu Ser Gly Gln Ser Cys Pro Ser His Ala Gly Gly Ala
 1          5          10          15
Thr Gly Pro Gly Arg Cys Gly Phe Ser Leu Pro Ala Pro Pro Val Leu
 20          25          30
Cys Trp Ala Leu Val Met Ser Arg His Ser Leu Leu Gly Ser Gly Asp
 35          40          45
Leu Gly Phe Ile Phe Pro Ala Pro Pro Val Leu Cys Trp Ala Pro Val
 50          55          60
Met Ser Arg His Ser Leu Leu Gly Leu Gly Asp Leu Gly Phe Ile Phe
 65          70          75          80
Pro Ala Pro Pro Val Leu Arg Trp Ala Pro Val Met Ser Arg His Ser
 85          90          95
Leu Leu Gly Ser Gly Gly Leu Gly Phe Val Leu Tyr Leu Val Leu Pro
100          105          110
Phe Thr Gln Ala Pro Ser
115

```

<210> 1723

<211> 371

<212> DNA

<213> Homo sapiens

<400> 1723

```

acgcgtttga agctggatgc atggatatcc agcgcgcgcca tcgggtcaaa tgggttgacg
60
ctgcccttga tggtcaccgg ggcgtagcga tctaccttac cgttgatgtc gacgtcgcc
120
ggtttggcct ggcggctgtc aatggtgccca atcttccggt tgagttgttg aatggcagt
180
gcaaagtgtg gcgtgagget gaagtcggcg aagttggccg agccatcatt gatcgcaacc
240
tgcccaatgt gaatgccag tggcttctct ttgctggccg ccggtgtgtc tgttgccagt
300
gtcggccggg tgcgggatca gcaagtcac gatgttggtg ggcgggtcat cggatgatcg
360
tgcattcaat a
371

```

<210> 1724

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1724

```

Met Asp Ile Gln Arg Arg His Arg Val Lys Trp Val Asp Ala Ala Leu
 1          5          10          15
Asp Gly His Arg Gly Val Ala Ile Tyr Leu Thr Val Asp Val Asp Ala
 20          25          30
Arg Arg Phe Gly Leu Ala Ala Val Asn Gly Ala Asn Leu Pro Val Glu
 35          40          45
Leu Leu Asn Gly Ser Gly Lys Val Gly Arg Glu Ala Glu Val Gly Glu
 50          55          60
Val Gly Arg Ala Ile Ile Asp Arg Asn Leu Pro Asn Val Asn Ala Gln

```

```

<400> 1726
Asp His Ala Val Leu Glu Ala Glu Arg Gln Lys Met Ser Ala Leu Val
 1              5              10              15
Arg Gly Leu Gln Arg Glu Leu Glu Glu Thr Ser Glu Glu Thr Gly His
      20              25              30
Trp Gln Ser Met Phe Gln Lys Asn Lys Glu Asp Leu Arg Ala Thr Lys
      35              40              45
Gln Glu Leu Leu Gln Leu Arg Met Glu Lys Glu Glu Met Glu Glu Glu

```



```

      50      55      60
Leu Gly Glu Lys Ile Glu Val Leu Gln Arg Glu Leu Glu Gln Ala Arg
65      70      75      80
Ala Ser Ala Gly Asp Thr Arg Gln Val Glu Val Leu Lys Lys Glu Leu
      85      90      95
Leu Arg Thr Gln Glu Glu Leu Lys Glu Leu Gln Ala Glu Arg Gln Ser
      100      105      110
Gln Glu Val Ala Gly Arg His Arg Asp Arg Glu Leu Glu Lys Gln Leu
      115      120      125
Ala Val Leu Arg Val Glu Ala Asp Arg Gly Arg Glu Leu Glu Glu Gln
      130      135      140
Asn Leu Gln Leu Gln Lys Thr Leu Gln Gln Leu Arg Gln Asp Cys Glu
145      150      155      160
Glu Ala Ser Lys Ala Lys Met Val Ala Glu Ala Glu Ala Thr Val Leu
      165      170      175
Gly Gln Arg Arg Ala Ala Val Glu Thr Thr Leu Arg Glu Thr Gln Glu
      180      185      190
Glu Asn Asp Glu Phe Arg Arg Arg Ile Leu Gly Leu Glu Gln Gln Leu
      195      200      205
Lys Glu Thr Arg Gly Leu Val Asp Gly Gly Glu Ala Val Glu Ala Arg
      210      215      220
Leu Arg Asp Lys Leu Gln
225      230

```

<210> 1727

<211> 474

<212> DNA

<213> Homo sapiens

<400> 1727

```

accacactct ccacaacatc gccagaaaca gtcgctgcc aagggtcca ccatgtttta
60
gcagcttcag aagacaaaga taagatgaaa aaggaagttt tacaaagctc aaggacatt
120
atgcaatcca aatcagcttg cgaaattaaa caaagtcacc aagaatgtag tacccaacaa
180
acacaacaga agaagtattt ggagcagttg cacttgcccc aaagcaaacc aatttcccca
240
aatttcaaag ttaaaacat caaacttcca actctagatc atacattaaa tgaaacagac
300
cacagctatg aaagtcataa acagcaatct gagattgatg ttcaaacctt taccaaaaaa
360
caatatctga aaaccaagaa aactgaagca agcactgaat gtagtcataa gcaatctctg
420
gctgaaagac attatcagtt acctaagaag gagaaaagag tgacagtaca attg
474

```

<210> 1728

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1728

Met Lys Lys Glu Val Leu Gln Ser Ser Arg Asp Ile Met Gln Ser Lys

```

      1           5           10           15
Ser Ala Cys Glu Ile Lys Gln Ser His Gln Glu Cys Ser Thr Gln Gln
      20           25           30
Thr Gln Gln Lys Lys Tyr Leu Glu Gln Leu His Leu Pro Gln Ser Lys
      35           40           45
Pro Ile Ser Pro Asn Phe Lys Val Lys Thr Ile Lys Leu Pro Thr Leu
      50           55           60
Asp His Thr Leu Asn Glu Thr Asp His Ser Tyr Glu Ser His Lys Gln
      65           70           75           80
Gln Ser Glu Ile Asp Val Gln Thr Phe Thr Lys Lys Gln Tyr Leu Lys
      85           90           95
Thr Lys Lys Thr Glu Ala Ser Thr Glu Cys Ser His Lys Gln Ser Leu
      100          105          110
Ala Glu Arg His Tyr Gln Leu Pro Lys Lys Glu Lys Arg Val Thr Val
      115          120          125
Gln Leu
      130

```

<210> 1729

<211> 470

<212> DNA

<213> Homo sapiens

<400> 1729

```

acgcgtgact cgccataaca ttgctgacac gttttccacg gcaaggagg catcatgacg
60
aggatcgacg tgtggctgtg gtcggtgcgc gtctataagt cccggtcgtt ggctaccgcc
120
gccgtcaagg gcggccacat tcgcctcaat ggagaccggt ttaaaccctc ccacgacgtg
180
aaacccggcg ataccgtcac catccacacc cccggatggg accgggtcct caaggtcac
240
aaccgatca cgaaaagagt cggcgccaaa ctgcgggtcg aggttacga agatctgtca
300
nngcccccg acccgctac ctctctgnct cccctcgccc gccgcgaccg tggggctgga
360
cgaccaccca agaaggatcg tcgcgagatc gatcggtcc gaggcggga ctctcgctat
420
tgaggactct tcgcccggcc caacacacca cggctcgcg ccgaattggc
470

```

<210> 1730

<211> 131

<212> PRT

<213> Homo sapiens

<400> 1730

```

His Val Phe His Gly Lys Gly Gly Ile Met Thr Arg Ile Asp Val Trp
      1           5           10           15
Leu Trp Ser Val Arg Val Tyr Lys Ser Arg Ser Leu Ala Thr Ala Ala
      20           25           30
Val Lys Gly Gly His Ile Arg Leu Asn Gly Asp Pro Val Lys Pro Ser
      35           40           45
His Asp Val Lys Pro Gly Asp Thr Val Thr Ile His Thr Pro Gly Trp

```

```

      50              55              60
Asp Arg Val Leu Lys Val Ile Asn Pro Ile Thr Lys Arg Val Gly Ala
65              70              75              80
Lys Leu Ala Val Glu Ala Tyr Glu Asp Leu Ser Xaa Pro Pro Asp Pro
      85              90              95
Pro Thr Ser Leu Xaa Pro Leu Ala Arg Arg Asp Arg Gly Ala Gly Arg
      100              105              110
Pro Thr Lys Lys Asp Arg Arg Glu Ile Asp Arg Leu Arg Gly Arg Asp
      115              120              125
Ser Arg Tyr
      130

```

<210> 1731
 <211> 534
 <212> DNA
 <213> Homo sapiens

```

<400> 1731
agcgctccct gcctgctgct gggcggaggg aaggcggcaa gagctgcgga gcccctggaa
60
gagcttccag gaacctgctg ctgtgggata aaggaatgag gttcagaaag gggcagggag
120
ttgcccgcag cgcaccgca cgtcttcagc cgcaccgttg tctgacctc tctgtcccg
180
ccctgcccc gtctcaccat ggccttctgg acacagctga tgctgctgct ctggaagaat
240
ttcatgtatc gccggagaca gccgggtccag ctcttggtcg aattgctgtg gcctctcttc
300
ctcttcttca tcttggtggc tgttcgccac tcccaccgc cctggagca ccatgaatgc
360
cacttccaa acaagccact gccatcggcg ggcaccgtgc cctggctcca ggttctcatc
420
tgtaatgtga acaacacctg ctttccgcag ctgacaccgg gcgaggagcc cgggcgcctg
480
agcaacttca acgactccct ggtctcccg ctgctacgtc ggagagaggc tgga
534

```

<210> 1732
 <211> 112
 <212> PRT
 <213> Homo sapiens

```

<400> 1732
Met Ala Phe Trp Thr Gln Leu Met Leu Leu Leu Trp Lys Asn Phe Met
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Tyr Arg Arg Arg Gln Pro Val Gln Leu Leu Val Glu Leu Leu Trp Pro
      20              25              30
Leu Phe Leu Phe Phe Ile Leu Val Ala Val Arg His Ser His Pro Pro
      35              40              45
Leu Glu His His Glu Cys His Phe Pro Asn Lys Pro Leu Pro Ser Ala
      50              55              60
Gly Thr Val Pro Trp Leu Gln Gly Leu Ile Cys Asn Val Asn Asn Thr
65              70              75              80
Cys Phe Pro Gln Leu Thr Pro Gly Glu Glu Pro Gly Arg Leu Ser Asn

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85 90 95
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<210> 1733
 <211> 409
 <212> DNA
 <213> Homo sapiens

<400> 1733
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 gggcaactgc accctctgcg tcgaggacta ctgcgcgagg tacgcggcga ggatcctcaa
 180
 catcgtctcc gacggcaacg tcctgcagcg cgcacgggcc gcacagccag cgtggctggt
 240
 tgggtgtggtc gcggggatca gcgaactccg atccgtacgt attctccagc ctgcagcgtt
 300
 accggggcag cactgggttt taggaccttc gtcgggtctc gatcgatggc gtgctgtcac
 360
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 409

<210> 1734
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 1734
 Met Ala Asp Pro Thr Val Pro Gly His Asp Pro Arg Arg Pro Ser Pro
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 Asp Pro Asp Met Pro Trp Leu Ile Arg Asp Ile Thr Leu Gly Asn Asn
 20 25 30
 Val Ile Ala Gly Ser Thr Gly Asn Cys Thr Leu Cys Val Glu Asp Tyr
 35 40 45
 Ser Arg Arg Tyr Ala Ala Arg Ile Leu Asn Ile Val Ser Asp Gly Asn
 50 55 60
 Val Leu Gln Arg Ala Ser Ala Ala Gln Pro Ala Trp Leu Val Gly Val
 65 70 75 80
 Val Ala Gly Ile Ser Glu Leu Arg Ser Val Arg Ile Leu Gln Pro Arg
 85 90 95
 Arg Leu Pro Gly Asp His Trp Phe Leu Gly Pro Ser Leu Gly Leu Asp
 100 105 110
 Arg Trp Arg Ala Val Thr Ala Ala Gly Ala Leu Leu Pro Gly Ile Asp
 115 120 125
 Leu Lys Ala Val Thr Arg
 130

<210> 1735
 <211> 342
 <212> DNA
 <213> Homo sapiens

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 120
 cgtcaggcac caggaaacgt accgacttcc cgctggccgg cagttgacgg atctgggtgg
 180
 cggacaccgc aagcggggtc tgccagacga atgcaatatt ccggttcggc ccggtcaggg
 240
 ccaaggggtc acttaccgac cgcgcggcca gcaggttgcg caaggcatcc ggcggttcgc
 300
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 342

<210> 1736
 <211> 112
 <212> PRT
 <213> Homo sapiens

<400> 1736
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 1 5 10 15
 Arg Ser Ser Ala Pro Phe Ser Ser Thr His Gly Lys Ala Arg Ala His
 20 25 30
 Arg Cys Arg Pro Gly Pro Arg Gln Ala Pro Gly Asn Val Pro Thr Ser
 35 40 45
 Arg Trp Pro Ala Val Asp Gly Ser Gly Trp Arg Thr Pro Gln Ala Gly
 50 55 60
 Ser Ala Arg Arg Met Gln Tyr Ser Arg Ser Ala Arg Ser Gly Pro Arg
 65 70 75 80
 Gly His Leu Pro Thr Ala Arg Pro Ala Gly Cys Ala Arg His Pro Ala
 85 90 95
 Val Arg Trp Arg His Pro Gly Val Ala Lys Pro Gly Cys Gly Asn Ala
 100 105 110

<210> 1737
 <211> 506
 <212> DNA
 <213> Homo sapiens

<400> 1737
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 120
 gtccggcgcc cacgtcacct cccacccagg cgaccgggtg gcgcgggtgc acctcaacca
 180
 aggcagtacc acggcgaagg tcacgatcac cctgcgctaa cccttcaagc gtcttcagca
 240
 ccgacctata agtctccag acacttttac gaccggccct ccccttggg gtggggccccg
 300
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 360

aggtatcctc gcagggtact acggccaagg catatttgac gttccacgct tgccactgcc
 420
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 480
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 506

<210> 1738

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1738

Met Ala Leu Arg Arg Gln Trp Gln Ala Trp Asn Val Lys Tyr Ala Leu
 1 5 10 15
 Ala Val Val Pro Cys Glu Asp Thr Tyr Cys Ser Pro Trp Gly Pro Glu
 20 25 30
 Val Val Leu Pro Gly Ala Ser His Asp Thr Lys Arg Thr Gly Pro Thr
 35 40 45
 Pro Arg Gly Arg Ala Gly Arg Lys Ser Val Trp Glu Thr Tyr Arg Ser
 50 55 60
 Val Leu Lys Thr Leu Glu Gly Leu Ala Gln Gly Asp Arg Asp Leu Arg
 65 70 75 80
 Arg Gly Thr Ala Leu Val Glu Val Gln Pro Arg His Pro Val Ala Trp
 85 90 95
 Val Gly Gly Asp Val Gly Ala Gly Arg Leu His Val Val Pro Val Gly
 100 105 110
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<210> 1739

<211> 420

<212> DNA

<213> Homo sapiens

<400> 1739

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 catcaagtga cggttgatgg atttgtttac cgtgttgata tgcggttacg ccccttttga
 120
 gagtctgggc cattgggttag cacgtttaat tcaatagagg actattatca aacccatggt
 180
 cgagagtggg agtggttatgc catggttaaa gcccggttta ttggtgttga ggacgagtat
 240
 aaacaagcgt tagaaaggat gttaaggcct ttcgtattta gacgttacat tgatttttagc
 300
 gctattgatt ctttgcgaaa aatgaaaacg atgatcagtg ctgaagttcg tcgcaagggg
 360
 ttaaaagaca atattaagtt gggaatggga gggatccgtg aaattgaatt tgtgggtcaa
 420

<210> 1740

<211> 140

<212> PRT

<213> Homo sapiens

<400> 1740

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Arg Val Ile Glu Asn Ala Ala Phe Phe Thr Lys Leu Gly Gln Arg Leu
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Ile Gly Ala Leu His Gln Val Thr Val Asp Gly Phe Val Tyr Arg Val
      20             25             30
Asp Met Arg Leu Arg Pro Phe Gly Glu Ser Gly Pro Leu Val Ser Thr
      35             40             45
Phe Asn Ser Ile Glu Asp Tyr Tyr Gln Thr His Gly Arg Glu Trp Glu
      50             55             60
Cys Tyr Ala Met Val Lys Ala Arg Val Ile Gly Val Glu Asp Glu Tyr
      65             70             75             80
Lys Gln Ala Leu Glu Arg Met Leu Arg Pro Phe Val Phe Arg Arg Tyr
      85             90             95
Ile Asp Phe Ser Ala Ile Asp Ser Leu Arg Lys Met Lys Thr Met Ile
      100             105             110
Ser Ala Glu Val Arg Arg Lys Gly Leu Lys Asp Asn Ile Lys Leu Gly
      115             120             125
Met Gly Gly Ile Arg Glu Ile Glu Phe Val Ala Gln
      130             135             140

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<210> 1741

<211> 378

<212> DNA

<213> Homo sapiens

<400> 1741

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nnacgcgtcg aggtgattca ggccgacgcc actgaccgcg tggtccttca cagtctcaat
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240
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cgtaaaccgc gctggtag
378

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<210> 1742

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1742

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Xaa Arg Val Glu Val Ile Gln Ala Asp Ala Thr Asp Pro Leu Val Leu
 1             5             10             15
His Ser Leu Asn Gly Gln Val Asp Val Val Val Ser Asn Pro Pro Tyr
      20             25             30
Val Pro Ala Gly Ala Val Glu Asp Thr Glu Thr Ala Gln His Glu Pro

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<400> 1743
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360
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420
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480
aacacatacc atgtgtacca taacaccgag gacctgtggg gggagcccca tgctgtggcc
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<210> 1744

<211> 796

<212> PRT

<213> Homo sapiens

<400> 1744

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Lys	Ala	His	Tyr	Thr	Leu	Gly	Arg	Leu	Ser	Asp	Asn	Thr	Pro	Glu	His
			20					25					30		
Tyr	Leu	Val	Gln	Gly	Arg	Tyr	Phe	Leu	Val	Arg	Asp	Val	Thr	Glu	Lys
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Met	Asp	Val	Leu	Gly	Thr	Val	Gly	Ser	Cys	Gly	Ala	Pro	Asn	Phe	Arg

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Gln	Val	Gln	Gly	Gly	Leu	Thr	Val	Phe	Gly	Met	Gly	Gln	Pro	Ser	Leu
65					70					75					80
Ser	Gly	Phe	Arg	Arg	Val	Leu	Gln	Lys	Leu	Gln	Lys	Asp	Gly	His	Arg
				85						90				95	
Glu	Cys	Val	Ile	Phe	Cys	Val	Arg	Glu	Glu	Pro	Val	Leu	Phe	Leu	Arg
			100						105				110		
Ala	Asp	Glu	Asp	Phe	Val	Ser	Tyr	Thr	Pro	Arg	Asp	Lys	Gln	Asn	Leu
		115					120					125			
His	Glu	Asn	Leu	Gln	Gly	Leu	Gly	Pro	Gly	Val	Arg	Val	Glu	Ser	Leu
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Glu	Leu	Ala	Ile	Arg	Lys	Glu	Ile	His	Asp	Phe	Ala	Gln	Leu	Ser	Glu
145				150					155						160
Asn	Thr	Tyr	His	Val	Tyr	His	Asn	Thr	Glu	Asp	Leu	Trp	Gly	Glu	Pro
				165					170					175	
His	Ala	Val	Ala	Ile	His	Gly	Glu	Asp	Asp	Leu	His	Val	Thr	Glu	Glu
			180					185					190		
Val	Tyr	Lys	Arg	Pro	Leu	Phe	Leu	Gln	Pro	Thr	Tyr	Arg	Tyr	His	Arg
		195					200					205			
Leu	Pro	Leu	Pro	Glu	Gln	Gly	Ser	Pro	Leu	Glu	Ala	Gln	Leu	Asp	Ala
	210				215						220				
Phe	Val	Ser	Val	Leu	Arg	Glu	Thr	Pro	Ser	Leu	Leu	Gln	Leu	Arg	Asp
225				230						235					240
Ala	His	Gly	Pro	Pro	Ala	Leu	Val	Phe	Ser	Cys	Gln	Met	Gly	Val	
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Gly	Arg	Thr	Asn	Leu	Gly	Met	Val	Leu	Gly	Thr	Leu	Ile	Leu	Leu	His
			260					265					270		
Arg	Ser	Gly	Thr	Thr	Ser	Gln	Pro	Glu	Ala	Ala	Pro	Thr	Gln	Ala	Lys
	275						280					285			
Pro	Leu	Pro	Met	Glu	Gln	Phe	Gln	Val	Ile	Gln	Ser	Phe	Leu	Arg	Met
	290				295						300				
Val	Pro	Gln	Gly	Arg	Arg	Met	Val	Glu	Glu	Val	Asp	Arg	Ala	Ile	Thr
305				310						315					320
Ala	Cys	Ala	Glu	Leu	His	Asp	Leu	Lys	Glu	Val	Val	Leu	Glu	Asn	Gln
			325						330					335	
Lys	Lys	Leu	Glu	Gly	Ile	Arg	Pro	Glu	Ser	Pro	Ala	Gln	Gly	Ser	Gly
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Ser	Arg	His	Ser	Val	Trp	Gln	Arg	Ala	Leu	Trp	Ser	Leu	Glu	Arg	Tyr
	355					360						365			
Phe	Tyr	Leu	Ile	Leu	Phe	Asn	Tyr	Tyr	Leu	His	Glu	Gln	Tyr	Pro	Leu
	370				375					380					
Ala	Phe	Ala	Leu	Ser	Phe	Ser	Arg	Trp	Leu	Cys	Ala	His	Pro	Glu	Leu
385				390						395					400
Tyr	Arg	Leu	Pro	Val	Thr	Leu	Ser	Ser	Ala	Gly	Pro	Val	Ala	Pro	Arg
			405						410					415	
Asp	Leu	Ile	Ala	Arg	Gly	Ser	Leu	Arg	Glu	Asp	Asp	Leu	Val	Ser	Pro
		420						425					430		
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Val	Pro	Arg	Met	Pro	Ile	Tyr	Gly	Thr	Ala	Gln	Pro	Ser	Ala	Lys	Ala
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Leu	Gly	Ser	Ile	Leu	Ala	Tyr	Leu	Thr	Asp	Ala	Lys	Arg	Arg	Leu	Arg
465				470						475					480
Lys	Val	Val	Trp	Val	Ser	Leu	Arg	Glu	Glu	Ala	Val	Leu	Glu	Cys	Asp

485 490 495
 Gly His Thr Tyr Ser Leu Arg Trp Pro Gly Pro Pro Val Ala Pro Asp
 500 505 510
 Gln Leu Glu Thr Leu Glu Ala Gln Leu Lys Ala His Leu Ser Glu Pro
 515 520 525
 Pro Pro Gly Lys Glu Gly Pro Leu Thr Tyr Arg Phe Gln Thr Cys Leu
 530 535 540
 Thr Met Gln Glu Val Phe Ser Gln His Arg Arg Ala Cys Pro Gly Leu
 545 550 555 560
 Thr Tyr His Arg Ile Pro Met Pro Asp Phe Cys Ala Pro Arg Glu Glu
 565 570 575
 Asp Phe Asp Gln Leu Leu Glu Ala Leu Arg Ala Ala Leu Ser Lys Asp
 580 585 590
 Pro Gly Thr Gly Phe Val Phe Ser Cys Leu Ser Gly Gln Gly Arg Thr
 595 600 605
 Thr Thr Ala Met Val Val Ala Val Leu Ala Phe Trp His Ile Gln Gly
 610 615 620
 Phe Pro Glu Val Gly Glu Glu Leu Val Ser Val Pro Asp Ala Lys
 625 630 635 640
 Phe Thr Lys Gly Glu Phe Gln Val Val Met Lys Val Val Gln Leu Leu
 645 650 655
 Pro Asp Gly His Arg Val Lys Lys Glu Val Asp Ala Ala Leu Asp Thr
 660 665 670
 Val Ser Glu Thr Met Thr Pro Met His Tyr His Leu Arg Glu Ile Ile
 675 680 685
 Ile Cys Thr Tyr Arg Gln Ala Lys Ala Ala Lys Glu Ala Gln Glu Met
 690 695 700
 Arg Arg Leu Gln Leu Arg Ser Leu Gln Tyr Leu Glu Arg Tyr Val Cys
 705 710 715 720
 Leu Ile Leu Phe Asn Ala Tyr Leu His Leu Glu Lys Ala Asp Ser Trp
 725 730 735
 Gln Arg Pro Phe Ser Thr Trp Met Gln Glu Val Ala Ser Lys Ala Gly
 740 745 750
 Ile Tyr Glu Ile Leu Asn Glu Leu Gly Phe Pro Glu Leu Glu Ser Gly
 755 760 765
 Glu Asp Gln Pro Phe Ser Arg Leu Arg Tyr Arg Trp Gln Glu Gln Ser
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 Cys Ser Leu Glu Pro Ser Ala Pro Glu Asp Leu Leu
 785 790 795

<210> 1745

<211> 426

<212> DNA

<213> Homo sapiens

<400> 1745

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<210> 1746
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 1746
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 35 40 45
 Glu Lys Arg Trp Asp Lys Ile Gln Glu Leu Val Lys Lys Asp Gly Ile
 50 55 60
 Thr Leu Glu Phe Thr Glu Phe Thr Gly Tyr Ser Gln Pro Asn Lys Ala
 65 70 75 80
 Thr Ala Asp Gly Glu Val Asp Leu Asn Ala Phe Gln His Tyr Asn Phe
 85 90 95
 Leu Asn Asn Trp Asn Lys Glu Asn Gly Lys Asp Leu Val Ala Ile Ala
 100 105 110
 Asp Thr Tyr Ile Ser Pro Ile Arg Leu Tyr Ser Gly Leu Asn Gly Ser
 115 120 125
 Asp Asn Lys Tyr Thr Lys Val Glu Ala Gly Val Cys Ser Arg
 130 135 140

<210> 1747
 <211> 373
 <212> DNA
 <213> Homo sapiens

<400> 1747
 nnaagctttt gtccacacag ataggaagta atcatggtca ctcaccgccc agaactgcat
 60
 atcaccgccc ctgaaggcgt gttggaggca ccggcggggc cgctcctcaa ggacggcacg
 120
 tggcacatca tgtaccagta cgaaccacac gcggatgggc acggcctctg gggacatgtc
 180
 acttccccca acttctctcc ctttaactgg acagacggag aagacattct ggttcagag
 240
 ggcgaggaaa ccgacctgtg ggcaggttct gttattagca acgctggaaa agtgacgctg
 300
 ttttttacct ccgtcaaggc cgacnaagac ggaaatccat cgggcagatg tcgccgacgg
 360
 caaagctacg cgt
 373

<210> 1748
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1748
 Met Val Thr His Arg Pro Glu Leu His Ile Thr Ala Pro Glu Gly Val
 1 5 10 15
 Leu Glu Ala Pro Ala Gly Ser Leu Leu Lys Asp Gly Thr Trp His Ile
 20 25 30
 Met Tyr Gln Tyr Glu Pro His Ala Asp Gly His Gly Leu Trp Gly His
 35 40 45
 Val Thr Ser Pro Asn Phe Ser Pro Phe Asn Trp Thr Asp Gly Glu Asp
 50 55 60
 Ile Leu Val Pro Glu Gly Glu Glu Thr Asp Leu Trp Ala Gly Ser Val
 65 70 75 80
 Ile Ser Asn Ala Gly Lys Val Thr Leu Phe Phe Thr Ser Val Lys Gly
 85 90 95
 Asp Xaa Asp Gly Asn Pro Ser Gly Arg Cys Arg Arg Arg Gln Ser Tyr
 100 105 110
 Ala

<210> 1749
 <211> 853
 <212> DNA
 <213> Homo sapiens

<400> 1749
 cccagcaggc aaagagagag gcctccctgg cttcgagtgt caggggagcc gcgttccttc
 60
 ccagggtctgg agcagaggac cacaaggcag cagaaagcgc ggggccagat gagggccagg
 120
 aaggggagga gagtgagggc caagaacgag ccttaagggg gcagtcccaa gctggagcca
 180
 cccagggtctg ggtctgggag tcctcagtgt ccacttgtcc cagggttaggg ggcttgcttc
 240
 gctctctcca gggccagtct ctgtgtgtgg ggactcagcc cgtggccggc agatgccatc
 300
 caggatgtac aaggtgcagc caaggcaggc catgcagggg ccgggcctgt ctgcagctgg
 360
 tggatgcctg tgggcatggc tttctctggg gaccccatc ctgtcagtag caaccctggc
 420
 agtgtccgga gcggtctag acaactttgg tcataggaac tctggaggtg ggttctggtc
 480
 atctgaggtg gctactcaac aggtttgagg cccacagca acagaagtcc aggaccact
 540
 aggttgcttc agaagcccta agactgatga gctggagcgc gcatttgaga gaagcctcgc
 600
 acccactgtg tactggcccc gctcaggccg gcttggcaca ccgttgctg ctggcggctc
 660
 tcatggggaa gcgcctgggc actggggatt gcttgtgggc cactcaactc ttggggcagt
 720

ggccgtaacc ctagtttgcc tgaggccctt atgtcccctt atgttcctgg tactggagct
 780
 tgagctcttg cctggcacgc tgcagctgca cccaccctgc ttgatccac ctgggaggcc
 840
 aggacactga gga
 853

<210> 1750
 <211> 64
 <212> PRT
 <213> Homo sapiens

<400> 1750
 Glu Lys Pro Arg Thr His Cys Val Leu Ala Pro Leu Arg Pro Ala Trp
 1 5 10 15
 His Thr Val Ala Cys Trp Arg Leu Ser Trp Gly Ser Ala Trp Ala Leu
 20 25 30
 Gly Ile Ala Cys Gly Pro Leu Asn Ser Trp Gly Ser Gly Arg Asn Pro
 35 40 45
 Ser Leu Pro Glu Ala Leu Met Ser Pro Tyr Val Pro Gly Thr Gly Ala
 50 55 60

<210> 1751
 <211> 531
 <212> DNA
 <213> Homo sapiens

<400> 1751
 ggccgcatcc cgcattctggg ccgatggcga atgggcaatt tcagtcgcag acagggacat
 60
 gacgatgccg ttgtcgagaa ggccatggcg acgaccgggg tctccgagct tactgatagg
 120
 gcatggtctt ccctgtcagg aggagagagg caacgggtac agctggctcg tgccttggca
 180
 caggagcccg agatcttatt tcttgacgag ccgacaaatc accttgactt gccacaccag
 240
 atcgacctcc tggagcgggt ccgaggactc ggctgacga cggtcaccgt cattcatgac
 300
 ctgacttgg ctgccgccta cgccgacgac ctcatcgtgc tcgactcggg tcgcatggtt
 360
 gctggcggac cggcgagcac agtgctgacg cctggccttg tccgtgacca ctttgggtgc
 420
 gacggtgagg tttggtcctc ctcgaggcgc ggcttcacct ggaacgggct gcagacatga
 480
 cgacgcgtat cgcagtatcc ctccgatggg acgacgccat tgacttgagc c
 531

<210> 1752
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 1752
 Gly Arg Ile Pro His Leu Gly Arg Trp Arg Met Gly Asn Phe Ser Arg

1 5 10 15
 Arg Gln Gly His Asp Asp Ala Val Val Glu Lys Ala Met Ala Thr Thr
 20 25 30
 Gly Val Ser Glu Leu Thr Asp Arg Ala Trp Ser Ser Leu Ser Gly Gly
 35 40 45
 Glu Arg Gln Arg Val Gln Leu Ala Arg Ala Leu Ala Gln Glu Pro Glu
 50 55 60
 Ile Leu Phe Leu Asp Glu Pro Thr Asn His Leu Asp Leu Pro His Gln
 65 70 75 80
 Ile Asp Leu Leu Glu Arg Val Arg Gly Leu Gly Leu Thr Thr Val Thr
 85 90 95
 Val Ile His Asp Leu Asp Leu Ala Ala Tyr Ala Asp Asp Leu Ile
 100 105 110
 Val Leu Asp Ser Gly Arg Met Val Ala Gly Gly Pro Ala Ser Thr Val
 115 120 125
 Leu Thr Pro Gly Leu Val Arg Asp His Phe Gly Val Asp Gly Glu Val
 130 135 140
 Trp Ser Ser Ser Arg Arg Gly Phe Thr Trp Asn Gly Leu Gln Thr
 145 150 155

<210> 1753

<211> 920

<212> DNA

<213> Homo sapiens

<400> 1753

gagacagtgg agaggctggg tcagtcccct gccaggaca ccccggctcct ggggccttgc
 60
 tgggacccga tggctctggg gactcagggc cgctgctgc tggacagggg ttccaaggac
 120
 acacagacca ggatcagcca aaagggccgc cgtctgcagc ccccggggac tccctcggcc
 180
 ccaccccaga gaagggcccg gaaacagctg aaccctgcc ggggcaccga gagagtggac
 240
 cctgggttcg agggggtgac tctgaagttt cagataaagc cggactccag cctgcagatc
 300
 atccccacgt acagcctgcc ctgcagtagc cgttctcagg aatcccctgc agatgctgtt
 360
 gggggccntg cagccatccc agagggcacc gagggccact cagcaggcag cgaggccctg
 420
 gagccccggc gctgtgcttc ctgtcggacc cagaggaccc cgctctggag agacgtgaa
 480
 gatgggaccc ttctctgcaa cgctgtggg atcaggtaca agaaatacgg cactcgctgc
 540
 tccagctgct ggctggtgcc caggaaaaat gtccagccca agaggctatg tggcagatgt
 600
 ggagtgtccc tggaccccat tcaggaaggt taaaccagc ttcaccctgc tgagctgctg
 660
 cttctgcctc cgtttcacca gtgggagaat gggcagaagc agctctccta ggaggattgg
 720
 ggaaagagcc ggctgcctc ctctctgcca tctccagatt caaggatccc gggggaagac
 780
 ccaggcctca ggtggcagag cctgctaggg gtcaccagcc ccttctccag tcagccttgg
 840

ccgaggcccc ctcaggagac gctctcagga aggatgagca ttgttacagc agggacaata
 900
 aagtacagag atatgccgag
 920

<210> 1754
 <211> 210
 <212> PRT
 <213> Homo sapiens

<400> 1754
 Glu Thr Val Glu Arg Leu Gly Gln Ser Pro Ala Gln Asp Thr Pro Val
 1 5 10 15
 Leu Gly Pro Cys Trp Asp Pro Met Ala Leu Gly Thr Gln Gly Arg Leu
 20 25 30
 Leu Leu Asp Arg Asp Ser Lys Asp Thr Gln Thr Arg Ile Ser Gln Lys
 35 40 45
 Gly Arg Arg Leu Gln Pro Pro Gly Thr Pro Ser Ala Pro Pro Gln Arg
 50 55 60
 Arg Pro Arg Lys Gln Leu Asn Pro Cys Arg Gly Thr Glu Arg Val Asp
 65 70 75 80
 Pro Gly Phe Glu Gly Val Thr Leu Lys Phe Gln Ile Lys Pro Asp Ser
 85 90 95
 Ser Leu Gln Ile Ile Pro Thr Tyr Ser Leu Pro Cys Ser Ser Arg Ser
 100 105 110
 Gln Glu Ser Pro Ala Asp Ala Val Gly Gly Xaa Ala Ala Ile Pro Glu
 115 120 125
 Gly Thr Glu Gly His Ser Ala Gly Ser Glu Ala Leu Glu Pro Arg Arg
 130 135 140
 Cys Ala Ser Cys Arg Thr Gln Arg Thr Pro Leu Trp Arg Asp Ala Glu
 145 150 155 160
 Asp Gly Thr Leu Leu Cys Asn Ala Cys Gly Ile Arg Tyr Lys Lys Tyr
 165 170 175
 Gly Thr Arg Cys Ser Ser Cys Trp Leu Val Pro Arg Lys Asn Val Gln
 180 185 190
 Pro Lys Arg Leu Cys Gly Arg Cys Gly Val Ser Leu Asp Pro Ile Gln
 195 200 205
 Glu Gly
 210

<210> 1755
 <211> 437
 <212> DNA
 <213> Homo sapiens

<400> 1755
 nnttctgcag agtagggaga cagtcttggg cctggatggc cattagtgc tggagtcag
 60
 ggagcaatca gaaatgatca aggagaatcc ttgatacgaa ctgcattcca gtgtcttcag
 120
 ttggttga cagattttct accaacaatg cctgtactt gctgcaaat agttgtgat
 180
 gttgcaggta gctttggcct ccataaccaa gaactcaata ttagtttaac ttcaataggt
 240

ttattgtgga atatttcaga ttattttttc caaagagggg aaactattga aaaagaacta
 300
 aataaggaag aggcagcaca gcaaaagcag gcagaagaga aaggagttgt tttaaactcg
 360
 ccattccacc ctgcaccgcc atttgattgc ttgtgggtat gtctttatgc aaaattgggt
 420
 gaactatgtg tggatcc
 437

<210> 1756

<211> 126

<212> PRT

<213> Homo sapiens

<400> 1756

Met	Gly	Ala	Ile	Arg	Asn	Asp	Gln	Gly	Glu	Ser	Leu	Ile	Arg	Thr	Ala
1				5				10					15		
Phe	Gln	Cys	Leu	Gln	Leu	Val	Val	Thr	Asp	Phe	Leu	Pro	Thr	Met	Pro
			20					25					30		
Cys	Thr	Cys	Leu	Gln	Ile	Val	Val	Asp	Val	Ala	Gly	Ser	Phe	Gly	Leu
			35					40					45		
His	Asn	Gln	Glu	Leu	Asn	Ile	Ser	Leu	Thr	Ser	Ile	Gly	Leu	Leu	Trp
			50					55				60			
Asn	Ile	Ser	Asp	Tyr	Phe	Phe	Gln	Arg	Gly	Glu	Thr	Ile	Glu	Lys	Glu
65					70					75				80	
Leu	Asn	Lys	Glu	Glu	Ala	Ala	Gln	Gln	Lys	Gln	Ala	Glu	Glu	Lys	Gly
				85						90				95	
Val	Val	Leu	Asn	Arg	Pro	Phe	His	Pro	Ala	Pro	Pro	Phe	Asp	Cys	Leu
				100					105					110	
Trp	Leu	Cys	Leu	Tyr	Ala	Lys	Leu	Gly	Glu	Leu	Cys	Val	Asp		
			115					120					125		

<210> 1757

<211> 1297

<212> DNA

<213> Homo sapiens

<400> 1757

nggatccgac ggaaatagaa ttgaaggcat tctaaatgg ctaaccgtac agtgaaggat
 60
 gcgcacagca tccatggcac caaccctcaa tatctggtgg agaagatcat tcgaacgcga
 120
 atctatgagt ccaagtactg gaaagaggag tgctttggac ttacagctga acttgtagtc
 180
 gataaagcca tggagttaag gtttgtgggt ggcgtctatg gtggcaacat aaaaccaaca
 240
 ccctttctgt gtttaacctt gaagatgctt caaattcaac ccgagaagga tatcattgta
 300
 gagtttatca aaaatgaaga tttcaagtat gtccgcatgc tgggggcact ttacatgagg
 360
 ctgacaggca ctgcaattga ttgctacaag tacttggaac ctttgtacaa tgactatcga
 420
 aaaatcaaga gccagaaccg aaatggggag tttgaattga tgcattgtga tgagtttatt
 480

gatgaactat tgcacagtga gagagtctgt gatatcattc tgccccgact acagaaacgc
 540
 tatgtattag aggaagctga gcaactggag cctcgagtta gtgctctgga agaggacatg
 600
 gatgatgtgg agtccagtga agaggaagaa gaggaggatg agaagttgga aagagtgcc
 660
 tcacctgac accgccggag aagctaccga gacttggaca agccccgtcg ctctcccaca
 720
 ctgcgctaca ggaggagtag gagccggtct cccagaaggc ggagtcgac tcccaaaagg
 780
 agaagccct cccctcgccg agaaaggcat cggagcaaga gtccaagacg tcaccgcagc
 840
 aggtcccgag atcggcggca cagatcccg tccaagtccc caggatcatca ccgtagtcac
 900
 agacacagga gccactcaaa gtctcccgaa aggtctaaga agagccacaa gaagagccgg
 960
 agagggaaatg agtaatggac tcagtttggg tttagtccac atggcctcct gtggatataa
 1020
 ggatatctgt atgtggaagg attaagatct cccccaggca gctataagaa tatttttagtt
 1080
 tttttcttat caagtttctc aacctttatt tttaatgaag gaggtgctga gttttgtatc
 1140
 tttttaatca taatcaacat cagtttttga cccaactaac cttgactgta ttcaaactta
 1200
 tgagagtata aaggatctgg aggttgggga tatgactgac aaggaaaggc tgtggccacc
 1260
 tgatgacct ttcccttttt attaaaccgg acacacc
 1297

<210> 1758

<211> 312

<212> PRT

<213> Homo sapiens

<400> 1758

Met	Ala	Asn	Arg	Thr	Val	Lys	Asp	Ala	His	Ser	Ile	His	Gly	Thr	Asn
1				5				10					15		
Pro	Gln	Tyr	Leu	Val	Glu	Lys	Ile	Ile	Arg	Thr	Arg	Ile	Tyr	Glu	Ser
			20					25					30		
Lys	Tyr	Trp	Lys	Glu	Glu	Cys	Phe	Gly	Leu	Thr	Ala	Glu	Leu	Val	Val
		35					40					45			
Asp	Lys	Ala	Met	Glu	Leu	Arg	Phe	Val	Gly	Gly	Val	Tyr	Gly	Gly	Asn
	50					55					60				
Ile	Lys	Pro	Thr	Pro	Phe	Leu	Cys	Leu	Thr	Leu	Lys	Met	Leu	Gln	Ile
65				70				75						80	
Gln	Pro	Glu	Lys	Asp	Ile	Ile	Val	Glu	Phe	Ile	Lys	Asn	Glu	Asp	Phe
			85					90					95		
Lys	Tyr	Val	Arg	Met	Leu	Gly	Ala	Leu	Tyr	Met	Arg	Leu	Thr	Gly	Thr
			100					105					110		
Ala	Ile	Asp	Cys	Tyr	Lys	Tyr	Leu	Glu	Pro	Leu	Tyr	Asn	Asp	Tyr	Arg
		115					120					125			
Lys	Ile	Lys	Ser	Gln	Asn	Arg	Asn	Gly	Glu	Phe	Glu	Leu	Met	His	Val
	130				135						140				
Asp	Glu	Phe	Ile	Asp	Glu	Leu	Leu	His	Ser	Glu	Arg	Val	Cys	Asp	Ile

```

145          150          155          160
Ile Leu Pro Arg Leu Gln Lys Arg Tyr Val Leu Glu Glu Ala Glu Gln
          165          170          175
Leu Glu Pro Arg Val Ser Ala Leu Glu Glu Asp Met Asp Asp Val Glu
          180          185          190
Ser Ser Glu Glu Glu Glu Glu Glu Asp Glu Lys Leu Glu Arg Val Pro
          195          200          205
Ser Pro Asp His Arg Arg Arg Ser Tyr Arg Asp Leu Asp Lys Pro Arg
          210          215          220
Arg Ser Pro Thr Leu Arg Tyr Arg Arg Ser Arg Ser Arg Ser Pro Arg
225          230          235          240
Arg Arg Ser Arg Ser Pro Lys Arg Arg Ser Pro Ser Pro Arg Arg Glu
          245          250          255
Arg His Arg Ser Lys Ser Pro Arg Arg His Arg Ser Arg Ser Arg Asp
          260          265          270
Arg Arg His Arg Ser Arg Ser Lys Ser Pro Gly His His Arg Ser His
          275          280          285
Arg His Arg Ser His Ser Lys Ser Pro Glu Arg Ser Lys Lys Ser His
          290          295          300
Lys Lys Ser Arg Arg Gly Asn Glu
305          310

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<210> 1759

<211> 324

<212> DNA

<213> Homo sapiens

<400> 1759

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aattccatag tcctcatggg caagagttac acagcgtgga ggaccaactc ccaggcactc
60
ggcctgggca gacacaatta ttgtcggaat ccagatggtg atgccagacc ttggtgccat
120
gtgatgaagg accgaaagct gacgtgggaa tactgtgaca tgtcccatg ctccacctgt
180
ggcctgaggc agtgcaaacg gcctcagttt agaactaaag gaggactcta cacagacatc
240
acctcacacc cttggcaggc tgccatcttt gtcagcaaca agaggtctcc tggagagaga
300
ttcctttgtg gaggggtgct gatc
324

```

<210> 1760

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1760

```

Asn Ser Ile Val Leu Met Gly Lys Ser Tyr Thr Ala Trp Arg Thr Asn
1          5          10          15
Ser Gln Ala Leu Gly Leu Gly Arg His Asn Tyr Cys Arg Asn Pro Asp
          20          25          30
Gly Asp Ala Arg Pro Trp Cys His Val Met Lys Asp Arg Lys Leu Thr
          35          40          45
Trp Glu Tyr Cys Asp Met Ser Pro Cys Ser Thr Cys Gly Leu Arg Gln

```

```

      50              55              60
Cys Lys Arg Pro Gln Phe Arg Thr Lys Gly Gly Leu Tyr Thr Asp Ile
65              70              75              80
Thr Ser His Pro Trp Gln Ala Ala Ile Phe Val Ser Asn Lys Arg Ser
      85              90              95
Pro Gly Glu Arg Phe Leu Cys Gly Gly Val Leu Ile
      100              105

```

<210> 1761

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1761

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ngcgatctcg gctcactaca acctcgggtga cagagcgaga ctctatccca aaaaaataaa
60
aataaaaaatc aactggagaa ggaaatgggg ttggggagca tcctctgaat atataaaggc
120
agccattcat ttagggagag gaggtagaag gaaatgctgt ttgtcgatgg ttcttttcca
180
gagaggaaga gaggagaaag gaagagcggg gagcaggtgg ggagcccga gtaagacccc
240
acagtggggc caggtggtct tgcacctgt attccactt tggctggggc agcccagagt
300
ccaggccagc aggtaatgcc ccagccatgc ccaactcggtc ctattggatc c
351

```

<210> 1762

<211> 109

<212> PRT

<213> Homo sapiens

<400> 1762

```

Met Ala Gly Ala Leu Pro Ala Gly Leu Asp Ser Gly Leu Pro Gln Pro
1              5              10              15
Lys Trp Glu Tyr Arg Val Gln Asp His Leu Ala Pro Leu Trp Gly Leu
      20              25              30
Thr Ala Gly Ser Pro Pro Ala Pro Arg Ser Ser Phe Leu Leu Ser Ser
      35              40              45
Ser Leu Glu Lys Asn His Arg Gln Thr Ala Phe Pro Ser Thr Ser Ser
      50              55              60
Pro Thr Met Asn Gly Cys Leu Tyr Ile Phe Arg Gly Cys Ser Pro Thr
65              70              75              80
Pro Phe Pro Ser Pro Val Asp Phe Tyr Phe Tyr Phe Phe Gly Ile Glu
      85              90              95
Ser Arg Ser Val Thr Glu Val Val Val Ser Arg Asp Arg
      100              105

```

<210> 1763

<211> 356

<212> DNA

<213> Homo sapiens

<400> 1763

gcgcgccggg ggcgcgatgt ggagcgggca cttaccggtt tcatggccaa gacaggcgag
 60
 actcagagtc ttttcaaaga tgacgtcagc acatttccat tgattgctgc cagaccttcc
 120
 accatcccct acctgacagc tcttcttccg tctgaactgg agatgcaaca aatggaagag
 180
 acagattcct cggagcagga tgaacagaca gacacagaga accttgctct tcatatcagc
 240
 atggaggatt ctggagccga gaaagagaac acctctgtcc tgcagcagaa cccctccttg
 300
 tcgggtagcc ggaatgggga ggagaacatc atcgataacc cttatctgcg accggt
 356

<210> 1764

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1764

Ala	Arg	Arg	Gly	Arg	Asp	Val	Glu	Arg	Ala	Leu	Thr	Arg	Phe	Met	Ala
1			5						10					15	
Lys	Thr	Gly	Glu	Thr	Gln	Ser	Leu	Phe	Lys	Asp	Asp	Val	Ser	Thr	Phe
		20						25					30		
Pro	Leu	Ile	Ala	Ala	Arg	Pro	Phe	Thr	Ile	Pro	Tyr	Leu	Thr	Ala	Leu
		35					40					45			
Leu	Pro	Ser	Glu	Leu	Glu	Met	Gln	Gln	Met	Glu	Glu	Thr	Asp	Ser	Ser
	50					55					60				
Glu	Gln	Asp	Glu	Gln	Thr	Asp	Thr	Glu	Asn	Leu	Ala	Leu	His	Ile	Ser
65					70				75					80	
Met	Glu	Asp	Ser	Gly	Ala	Glu	Lys	Glu	Asn	Thr	Ser	Val	Leu	Gln	Gln
			85						90				95		
Asn	Pro	Ser	Leu	Ser	Gly	Ser	Arg	Asn	Gly	Glu	Glu	Asn	Ile	Ile	Asp
		100						105					110		
Asn	Pro	Tyr	Leu	Arg	Pro										
			115												

<210> 1765

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1765

cgcccgcatc cttcgtgact ggcgccccgc cgccgggtgca aaagtgtcag gaaataccag
 60
 tcatgactat gtttagccgc acctctctgc agtatgcgat cgttctggca gcgctgggag
 120
 gtgccggtct ggcgctctgg gccatgtcga gtgcgacgga ggccaatcag gcggaaattg
 180
 cccaggccag gccaggcatt attgcggcgg cgccgggtgt cgtggatgtc gagggcgccg
 240
 tgctgcggct ctccaccag cgcgacgggg tgattcagga tgtgccggtg aaggaaggac
 300
 agcgggtcaa agccggcgat atcctcgccg cgctcgacaa tcgccgcgaa ctgatcg
 357

<210> 1766
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1766
 Met Thr Met Phe Ser Arg Thr Ser Leu Gln Tyr Ala Ile Val Leu Ala
 1 5 10 15
 Ala Leu Gly Gly Ala Gly Leu Ala Leu Trp Ala Met Ser Ser Ala Thr
 20 25 30
 Glu Ala Asn Gln Ala Glu Ile Ala Gln Ala Arg Pro Gly Ile Ile Ala
 35 40 45
 Ala Ala Arg Gly Val Val Asp Val Glu Gly Gly Leu Leu Arg Leu Ser
 50 55 60
 Thr Gln Arg Asp Gly Val Ile Gln Asp Val Pro Val Lys Glu Gly Gln
 65 70 75 80
 Arg Val Lys Ala Gly Asp Ile Leu Ala Ala Leu Asp Asn Arg Arg Glu
 85 90 95
 Leu Ile

<210> 1767
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 1767
 nnnccgcccgcac ggcccgccatg acgcaccgcga ttgacgtgaa ccagggcgac gatgcccaacc
 60
 ccggccaaca cgccaggctg cttgacgccg ccagccaacc cgacgaacgc cccaccaaga
 120
 acgagcccga gccatccccg gccaatcaac gccagacgta tggccacaac gagtgcgacg
 180
 agggacaaaac ccacctggag tccgtcgttg tgcattgcccc ccaccacgct caacgtcgtc
 240
 aatggacagc acaccgccag ccagagggca tgatccggat cgggtccggc gtagcgn
 297

<210> 1768
 <211> 73
 <212> PRT
 <213> Homo sapiens

<400> 1768
 Met Pro Thr Pro Ala Asn Thr Pro Gly Cys Leu Thr Pro Pro Ala Asn
 1 5 10 15
 Pro Thr Asn Ala Pro Pro Arg Thr Ser Pro Ser His Pro Arg Pro Ile
 20 25 30
 Asn Ala Arg Arg Met Ala Thr Thr Ser Ala Thr Arg Asp Lys Pro Thr
 35 40 45
 Trp Ser Pro Ser Leu Cys Met Pro Pro Thr Thr Leu Asn Val Val Asn
 50 55 60
 Gly Gln His Thr Ala Ser Gln Arg Ala

65

70

<210> 1769
 <211> 474
 <212> DNA
 <213> Homo sapiens

<400> 1769
 caccatgctg gctcgggttcg acgcattcgg gtgggtgagt ctgttctcgt caccgacggg
 60
 caggggtcatg ccgttcgtgg ccctgccatt gaggtgacga aagggtcagt tagcgtcgag
 120
 accgttgaga tcctccatac tcccgcgacc acgcatcgat gggtcgccgt ccaggcattg
 180
 ccgaagtccg atagagctga gctggcgggtg gcgaccctca ccgagatggg agttcacgaa
 240
 atcctcgctt ggcaggctga tcggagcatc gtgcgatgga agggcgacaa gcaagccaag
 300
 ggcgtcgcga ggtggcaagc ggctgcccgt gaggccacca aacagtctcg acgttttctt
 360
 gtgccacagg tagaactagc gcaaaccctg gaagttgtta agcggatttg caatgccag
 420
 gccgcctacg ttttgcacga gtcggccagt gaaccgctgg tgcacagga gctc
 474

<210> 1770
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 1770
 His His Ala Gly Ser Val Arg Arg Ile Arg Val Gly Glu Ser Val Leu
 1 5 10 15
 Val Thr Asp Gly Gln Gly His Ala Val Arg Gly Pro Ala Ile Glu Val
 20 25 30
 Thr Lys Gly Ser Val Ser Val Glu Thr Val Glu Ile Leu His Thr Pro
 35 40 45
 Ala Thr Thr His Arg Trp Val Ala Val Gln Ala Leu Pro Lys Ser Asp
 50 55 60
 Arg Ala Glu Leu Ala Val Ala Thr Leu Thr Glu Met Gly Val His Glu
 65 70 75 80
 Ile Leu Ala Trp Gln Ala Asp Arg Ser Ile Val Arg Trp Lys Gly Asp
 85 90 95
 Lys Gln Ala Lys Gly Val Ala Arg Trp Gln Ala Ala Ala Arg Glu Ala
 100 105 110
 Thr Lys Gln Ser Arg Arg Phe Leu Val Pro Gln Val Glu Leu Ala Gln
 115 120 125
 Thr Arg Glu Val Val Lys Arg Ile Cys Asn Ala Gln Ala Ala Tyr Val
 130 135 140
 Leu His Glu Ser Ala Ser Glu Pro Leu Val His Gln Glu Leu
 145 150 155

<210> 1771
 <211> 287

<212> DNA

<213> Homo sapiens

<400> 1771

acgcgtgatg ggtaattcta atacatgcaa agaattatct ctgcaagtat actcagatat
 60
 taataacagc ggggtgctgca gaggaagaag cctgggagaa tggaagtcag ggaaggagag
 120
 caacaggctt ctcaactctgt gccatgagca tgtgctagcc atggagacac tctgcatgtt
 180
 acctagaact gctgattcat tgctctggaa ttattcagct attcaagacc cagtgaata
 240
 cagcaagcag ctttcattca tacacacaca tgtgcatcca tgtgcac
 287

<210> 1772

<211> 93

<212> PRT

<213> Homo sapiens

<400> 1772

Met	Gly	Asn	Ser	Asn	Thr	Cys	Lys	Glu	Leu	Ser	Leu	Gln	Val	Tyr	Ser
1				5				10				15			
Asp	Ile	Asn	Asn	Ser	Gly	Cys	Arg	Arg	Gly	Arg	Ser	Leu	Gly	Glu	Trp
		20					25					30			
Lys	Ser	Gly	Lys	Glu	Ser	Asn	Arg	Leu	Leu	Thr	Leu	Cys	His	Glu	His
		35				40					45				
Val	Leu	Ala	Met	Glu	Thr	Leu	Cys	Met	Leu	Pro	Arg	Thr	Ala	Asp	Ser
	50				55				60						
Leu	Leu	Trp	Asn	Tyr	Ser	Ala	Ile	Gln	Asp	Pro	Val	Lys	Tyr	Ser	Lys
65			70					75						80	
Gln	Leu	Ser	Phe	Ile	His	Thr	His	Val	His	Pro	Cys	Ala			
			85					90							

<210> 1773

<211> 393

<212> DNA

<213> Homo sapiens

<400> 1773

accggtgagt tctacgtccc ggtaaccac ctcgagggtg aacaggcgca cctcgacgtc
 60
 ttcgattctc cgcttaacga gtacgcagcg atgggatttg agtacggcta ctctgttgcc
 120
 cgtccggatt ctctggtatt gtgggaagcc caattcggcg atttcaccaa cggtgcccag
 180
 acgatcatcg atgagttcat cgcctcggct ggctccaagt ggggtcagaa gtcgggagtc
 240
 gtgctgctgc tgccgcacgg ttacgaaggt caggggcctg atcactcgtc ggcccgtctg
 300
 gagcgcttcc tcaatctatg cagtgaagac gctttggccg tctgccagcc ctcgaccccg
 360
 gcaagctaca gccatttatt gcgtcagcac gcg
 393

<210> 1774
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 1774
 Thr Gly Glu Phe Tyr Val Pro Val Asn His Leu Gly Gly Glu Gln Ala
 1 5 10 15
 His Leu Asp Val Phe Asp Ser Pro Leu Asn Glu Tyr Ala Ala Met Gly
 20 25 30
 Phe Glu Tyr Gly Tyr Ser Val Ala Arg Pro Asp Ser Leu Val Leu Trp
 35 40 45
 Glu Ala Gln Phe Gly Asp Phe Thr Asn Gly Ala Gln Thr Ile Ile Asp
 50 55 60
 Glu Phe Ile Ala Ser Ala Gly Ser Lys Trp Gly Gln Lys Ser Gly Val
 65 70 75 80
 Val Leu Leu Leu Pro His Gly Tyr Glu Gly Gln Gly Pro Asp His Ser
 85 90 95
 Ser Ala Arg Leu Glu Arg Phe Leu Asn Leu Cys Ser Glu Asp Ala Leu
 100 105 110
 Ala Val Cys Gln Pro Ser Thr Pro Ala Ser Tyr Ser His Leu Leu Arg
 115 120 125
 Gln His Ala
 130

<210> 1775
 <211> 369
 <212> DNA
 <213> Homo sapiens

<400> 1775
 nncctccgag cagctctccg gggcagaccc cagctgcaag ccacagccc ggcctggtaa
 60
 cgggagggca tcgctagggg ggggtggggc ggcccggctt cgatgcagcc atgtgggagg
 120
 gccactctca gagaccccc gccttccttg cccccccac cccagagggg aagctggagc
 180
 tgggaggctg cagacccagg ccaaggtgtg gccagggctg gctttcttgg gaggtttga
 240
 gcatectgct tcttggccac ccagctctgg ggctgctgtc aactcttgat ttgtagacat
 300
 cactccagcc tctggcctgt caccctgaac ctccccatg tctgtgtctt ttctcactgg
 360
 aacaccggt
 369

<210> 1776
 <211> 59
 <212> PRT
 <213> Homo sapiens

<400> 1776
 Arg Glu Gly Ile Ala Arg Glu Gly Trp Gly Gly Pro Ala Ser Met Gln

1 5 10 15
 Pro Cys Gly Arg Ala Thr Leu Arg Asp Pro Pro Pro Ser Leu Pro Pro
 20 25 30
 Pro Pro Gln Arg Gly Ser Trp Ser Trp Glu Ala Ala Asp Pro Gly Gln
 35 40 45
 Gly Val Ala Arg Ala Gly Phe Leu Gly Arg Leu
 50 55

<210> 1777

<211> 370

<212> DNA

<213> Homo sapiens

<400> 1777

agcttcttat cactatcctt tagtgctttt tggctacct tagcggtaat gctccatcaa
 60
 gaatatgggtt ttggtagtgc aactgcggga ttttttggcc tcgctgggtgc cgccggagct
 120
 ttagcagcac cactgtccgg taaactaaca gataaacaag gaccgacacg ggtcacgcag
 180
 ctgggtgctg ccttagttgt cgtctctttc gcactatgt tgttattgcc ttacttcagt
 240
 atcagtaccc aagttataat gattattgtt gctaccatag tgtttgactt tgggtgttcag
 300
 gcggcactta ttgctcatca aaccttagtg tataacattg actctaccgc tcgtggacgc
 360
 cttaacgcgt
 370

<210> 1778

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1778

Ser Phe Leu Ser Leu Ser Phe Ser Ala Phe Trp Ser Thr Leu Ala Val
 1 5 10 15
 Met Leu His Gln Glu Tyr Gly Phe Gly Ser Ala Thr Ala Gly Phe Phe
 20 25 30
 Gly Leu Ala Gly Ala Ala Gly Ala Leu Ala Ala Pro Leu Ser Gly Lys
 35 40 45
 Leu Thr Asp Lys Gln Gly Pro Thr Arg Val Thr Gln Leu Gly Ala Ala
 50 55 60
 Leu Val Val Val Ser Phe Ala Ser Met Leu Leu Leu Pro Tyr Phe Ser
 65 70 75 80
 Ile Ser Thr Gln Val Ile Met Ile Ile Val Ala Thr Ile Val Phe Asp
 85 90 95
 Phe Gly Val Gln Ala Ala Leu Ile Ala His Gln Thr Leu Val Tyr Asn
 100 105 110
 Ile Asp Ser Thr Ala Arg Gly Arg Leu Asn Ala
 115 120

<210> 1779

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1779

ccatgtgtgt gtatatgctc gtgtgtgatg gtatgtatat gtgtatatgt gnntatatgt
60
atacacgtgt gttatgggtgt gtatatatgt atatacgtgt gtgtatatat atgtatatgg
120
gtatgtgtgt gcatgtgctg atgggtgtgt atatgtgtat atatgtaggt gtgtatatct
180
gggaatatat ggggtgtgtat atgtgtgtat aggtttttat atgtggggaa atatttaaac
240
ctgtgtatat tggaatgtgt gtgtatatgt gtgtatatat gngnggtgtgt atgtacatgt
300
atgtgtgtat atatgtgtgt atatacgtag gtgtgcatat gtgtg
345

<210> 1780

<211> 55

<212> PRT

<213> Homo sapiens

<400> 1780

Pro Cys Val Cys Ile Cys Ser Cys Val Met Val Cys Ile Cys Val Tyr
1 5 10 15
Val Xaa Ile Cys Ile His Val Cys Tyr Gly Val Tyr Ile Cys Ile Tyr
20 25 30
Val Cys Val Tyr Ile Cys Ile Trp Val Cys Val Cys Met Cys Val Trp
35 40 45
Val Cys Ile Cys Val Tyr Met
50 55

<210> 1781

<211> 349

<212> DNA

<213> Homo sapiens

<400> 1781

nacgcgtcat gctaaatttt gccctttatg gcaacatttt cgtcagaaca agcgggaagag
60
aagctactat ccaagtttca tacgccggtt aaaagaaaac atgatgatac gagatcatct
120
gatgtgaaca caacgcaaac tggttcaagc gccacgcca ttacacctgt acccttactg
180
cccagtgcac aagagcccag ttatctttgc cagtgggtgcg ctcccagac acgaaagcac
240
aagacatggg aggggtgatgc tattcttata ttgcatggaa ataaaactac ttgttcgcta
300
cgatccgcac atgatggcag catgctagtg acgaatgctg ccttccgga
349

<210> 1782

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1782

```

Met Ala Thr Phe Ser Ser Glu Gln Ala Glu Glu Lys Leu Leu Ser Lys
 1             5             10             15
Phe His Thr Pro Val Lys Arg Lys His Asp Asp Thr Arg Ser Ser Asp
      20             25             30
Val Asn Thr Thr Gln Thr Gly Ser Ser Ala Thr Pro Ile Thr Pro Val
      35             40             45
Pro Leu Leu Pro Ser Ala Gln Glu Pro Ser Tyr Leu Cys Gln Trp Cys
      50             55             60
Ala Pro Gln Thr Arg Lys His Lys Thr Trp Glu Gly Asp Ala Ile Leu
65             70             75             80
Ile Leu His Gly Asn Lys Thr Thr Cys Ser Leu Arg Ser Ala His Asp
      85             90             95
Gly Ser Met Leu Val Thr Asn Ala Ala Phe Arg
      100             105

```

<210> 1783

<211> 1829

<212> DNA

<213> Homo sapiens

<400> 1783

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gtgcacgact tcgacgccag cctctcgggc atcgggcagg aactgggccc cggcgcttac
60
agcatgagtg atgtcttggc attgcccatt ttcaagcagg aagattccag ccttccattg
120
gatgggtgaaa cagagcaccc accctttcag tatgtgatgt gtgctgcaac gtcaccagca
180
gtaaaactgc atgatgaaac gcttacttat ttgaaccaag gtcagtcata tgaaattcgg
240
atgctggata atcgaaaaat gggatgatatg cctgagatca atggaaaatt agtaaagagc
300
atcataaggg ttgtattcca tgacagacgg ctacaatata cagagcatca gcaacttgaa
360
ggatggaagt ggaatcgccc aggagacaga cttcttgatt tagatattcc aatgtctgtg
420
ggaataattg acacaaggac gaatccaggc cagttaaatt cggttgaatt tctgtgggac
480
ccagcaaaac gcacctctgc tttcattcag gtacactgca tcagcacaga atttactcca
540
cggaagcacg gaggtgaaaa gggagtgcgc tttaggatcc aggttgacac ctttaagcag
600
aatgaaaaatg gagaatacac agatcatcta cactcagcta gctgccaaat caaagttttt
660
aagcctaaag gtgcagacag gaaacaaaaa actgaccgag agaagatgga gaagagaaca
720
gctcatgaaa aagaaaagta tcagccgtcc tatgatacca caatcctcac agagatgagg
780
cttgagccta taattgaaga tgcagttgaa catgagcaga aanaagtcca gcaagcggac
840
tttgccgcag actacggtga ttctctggca aagcgaggca gttgttctcc gtggcccgat
900

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gccccacag cctatgtgaa taacagccct tccccagcgc ccactttcac ctccccacag
 960
 cagagcactt gcagtgtccc agacagcaat tcttcttccc caaatcatca gggagatgga
 1020
 gcttcacaga cctctggtga acaaattcag ccttcagcta cgatccagga aacacagcaa
 1080
 tggctgctca aaaacagatt ctcttcctac acaagactgt tctctaattt ttcaggtgcc
 1140
 gacttattaa aactgacaaa ggaggattta gttcaaattt gtggtgcagc cgatggaatt
 1200
 cggtcttata attcactgaa gtcaaggctc gtttagacccc gtttaaccat ctatgtctgc
 1260
 cgggagcagc caagcagcac agtgctgcaa gggcagcagc aagctgcaag cagtgcgaagc
 1320
 gagaatggca gtggggcacc ctatgtttat catgcaatct acttggaaga aatgattgcc
 1380
 tcagaagttg ctcgaaaact tgcgctggtg tttaatatcc ctctccacca aattaatcag
 1440
 gtttacagac aggttccac cggtattcac attcttgta gtgatcaggt aaatcaaac
 1500
 atttgttttt ccttttcaga ctggtattta cttttataca tgtaattgta gaactgtaga
 1560
 aaaattctgt gacctctttt gaaaataact atgagaatca ttttcagaga gttgggaatc
 1620
 actttggaag aacttataac caagagtttc aggcaccta gtgataatat ggaatacaag
 1680
 ccaaggaaaa ctggcttagc ctccccccag cccttttagga tgcagccaat cactggggca
 1740
 ctctagggat agtggcaggc tttggccctt tttatgaggt gagtcactgg atgtgttttc
 1800
 cttttgtcta ttatttgatg actaattta
 1829

<210> 1784

<211> 514

<212> PRT

<213> Homo sapiens

<400> 1784

Val	His	Asp	Phe	Asp	Ala	Ser	Leu	Ser	Gly	Ile	Gly	Gln	Glu	Leu	Gly
1				5					10					15	
Ala	Gly	Ala	Tyr	Ser	Met	Ser	Asp	Val	Leu	Ala	Leu	Pro	Ile	Phe	Lys
		20						25					30		
Gln	Glu	Asp	Ser	Ser	Leu	Pro	Leu	Asp	Gly	Glu	Thr	Glu	His	Pro	Pro
		35					40					45			
Phe	Gln	Tyr	Val	Met	Cys	Ala	Ala	Thr	Ser	Pro	Ala	Val	Lys	Leu	His
	50					55				60					
Asp	Glu	Thr	Leu	Thr	Tyr	Leu	Asn	Gln	Gly	Gln	Ser	Tyr	Glu	Ile	Arg
65					70				75					80	
Met	Leu	Asp	Asn	Arg	Lys	Met	Gly	Asp	Met	Pro	Glu	Ile	Asn	Gly	Lys
			85					90					95		
Leu	Val	Lys	Ser	Ile	Ile	Arg	Val	Val	Phe	His	Asp	Arg	Arg	Leu	Gln
		100					105					110			
Tyr	Thr	Glu	His	Gln	Gln	Leu	Glu	Gly	Trp	Lys	Trp	Asn	Arg	Pro	Gly

```

      115      120      125
Asp Arg Leu Leu Asp Leu Asp Ile Pro Met Ser Val Gly Ile Ile Asp
      130      135      140
Thr Arg Thr Asn Pro Gly Gln Leu Asn Ala Val Glu Phe Leu Trp Asp
      145      150      155      160
Pro Ala Lys Arg Thr Ser Ala Phe Ile Gln Val His Cys Ile Ser Thr
      165      170      175
Glu Phe Thr Pro Arg Lys His Gly Gly Glu Lys Gly Val Pro Phe Arg
      180      185      190
Ile Gln Val Asp Thr Phe Lys Gln Asn Glu Asn Gly Glu Tyr Thr Asp
      195      200      205
His Leu His Ser Ala Ser Cys Gln Ile Lys Val Phe Lys Pro Lys Gly
      210      215      220
Ala Asp Arg Lys Gln Lys Thr Asp Arg Glu Lys Met Glu Lys Arg Thr
      225      230      235      240
Ala His Glu Lys Glu Lys Tyr Gln Pro Ser Tyr Asp Thr Thr Ile Leu
      245      250      255
Thr Glu Met Arg Leu Glu Pro Ile Ile Glu Asp Ala Val Glu His Glu
      260      265      270
Gln Lys Xaa Val Gln Gln Ala Asp Phe Ala Ala Asp Tyr Gly Asp Ser
      275      280      285
Leu Ala Lys Arg Gly Ser Cys Ser Pro Trp Pro Asp Ala Pro Thr Ala
      290      295      300
Tyr Val Asn Asn Ser Pro Ser Pro Ala Pro Thr Phe Thr Ser Pro Gln
      305      310      315      320
Gln Ser Thr Cys Ser Val Pro Asp Ser Asn Ser Ser Ser Pro Asn His
      325      330      335
Gln Gly Asp Gly Ala Ser Gln Thr Ser Gly Glu Gln Ile Gln Pro Ser
      340      345      350
Ala Thr Ile Gln Glu Thr Gln Gln Trp Leu Leu Lys Asn Arg Phe Ser
      355      360      365
Ser Tyr Thr Arg Leu Phe Ser Asn Phe Ser Gly Ala Asp Leu Leu Lys
      370      375      380
Leu Thr Lys Glu Asp Leu Val Gln Ile Cys Gly Ala Ala Asp Gly Ile
      385      390      395      400
Arg Leu Tyr Asn Ser Leu Lys Ser Arg Ser Val Arg Pro Arg Leu Thr
      405      410      415
Ile Tyr Val Cys Arg Glu Gln Pro Ser Ser Thr Val Leu Gln Gly Gln
      420      425      430
Gln Gln Ala Ala Ser Ser Ala Ser Glu Asn Gly Ser Gly Ala Pro Tyr
      435      440      445
Val Tyr His Ala Ile Tyr Leu Glu Glu Met Ile Ala Ser Glu Val Ala
      450      455      460
Arg Lys Leu Ala Leu Val Phe Asn Ile Pro Leu His Gln Ile Asn Gln
      465      470      475      480
Val Tyr Arg Gln Gly Pro Thr Gly Ile His Ile Leu Val Ser Asp Gln
      485      490      495
Val Asn Gln Ile Ile Cys Phe Ser Phe Ser Asp Trp Tyr Leu Leu Leu
      500      505      510
Tyr Met

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<210> 1785

<211> 381

<212> DNA

<213> Homo sapiens

<400> 1785

atcacggacg cagaggagaa agggctgatt actccaggcg tgagtgttct gattgaacca
 60
 actagcggca acacaggcat tggactggcc tttatggctg ctgccaaggg ctacaaactt
 120
 acactcacia tgccctgcctc catgagcatg gagaggagga tcatattgaa ggcttttggt
 180
 gctgaacttg tccttactga cccactcttg ggaatgaaag gagctgtcaa gaaagcggaa
 240
 gagatacaag caaagacacc caactcgtac atccttcaac aatttgaaaa tccagctaac
 300
 ccaaagattc actatgagac tactgggcct gaaatctgga aagctacagc aggaaaaatt
 360
 gatggccttg tatctggtat c
 381

<210> 1786

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1786

Ile	Thr	Asp	Ala	Glu	Gly	Lys	Gly	Leu	Ile	Thr	Pro	Gly	Val	Ser	Val
1				5				10					15		
Leu	Ile	Glu	Pro	Thr	Ser	Gly	Asn	Thr	Gly	Ile	Gly	Leu	Ala	Phe	Met
		20					25					30			
Ala	Ala	Ala	Lys	Gly	Tyr	Lys	Leu	Thr	Leu	Thr	Met	Pro	Ala	Ser	Met
		35					40					45			
Ser	Met	Glu	Arg	Arg	Ile	Ile	Leu	Lys	Ala	Phe	Gly	Ala	Glu	Leu	Val
	50					55				60					
Leu	Thr	Asp	Pro	Leu	Leu	Gly	Met	Lys	Gly	Ala	Val	Lys	Lys	Ala	Glu
65				70				75						80	
Glu	Ile	Gln	Ala	Lys	Thr	Pro	Asn	Ser	Tyr	Ile	Leu	Gln	Gln	Phe	Glu
			85					90						95	
Asn	Pro	Ala	Asn	Pro	Lys	Ile	His	Tyr	Glu	Thr	Thr	Gly	Pro	Glu	Ile
		100						105					110		
Trp	Lys	Ala	Thr	Ala	Gly	Lys	Ile	Asp	Gly	Leu	Val	Ser	Gly	Ile	
		115					120						125		

<210> 1787

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1787

gtgcacacag caattcaata tgccaagaca ccagggttgca gcagagaaag atttaattgt
 60
 agggctcacct aacaaggaga tgagaacaaa ctttaaactct atctctctaa ggaatttgga
 120
 cttcggggttt ttaagggttta gaatggggcca aaacatggac attattgatt ggtcaaagag
 180

tacagggtca tggaacctgg agatgaaaaa gccatattct catgctgac ctgttctct
 240
 gtggaaggtc ttcaaattgg ttgccggaat aaaagatctg tcaaacatct tagg
 294

<210> 1788
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 1788
 Met Pro Arg His Gln Val Ala Ala Glu Lys Asp Leu Ile Val Gly Ser
 1 5 10 15
 Pro Asn Lys Glu Met Arg Thr Asn Phe Lys Ser Ile Ser Leu Arg Asn
 20 25 30
 Leu Asp Phe Gly Phe Leu Arg Phe Arg Met Gly Gln Asn Met Asp Ile
 35 40 45
 Ile Asp Trp Ser Lys Ser Thr Gly Ser Trp Asn Leu Glu Met Lys Lys
 50 55 60
 Pro Tyr Ser His Ala Asp Pro Val Pro Leu Trp Lys Val Phe Lys Leu
 65 70 75 80
 Val Ala Gly Ile Lys Asp Leu Ser Asn Ile Leu
 85 90

<210> 1789
 <211> 353
 <212> DNA
 <213> Homo sapiens

<400> 1789
 ttccacata caccacgcg gcatgtcctg acagagatgc acaccctag cacatattca
 60
 cacacacaga catgccacac cccgccatcc cccacactc gtacacgccc accaccctc
 120
 gcaggcacac atgcacacac gcgcgcgcac acgcacacac accccagcc cggaccggcc
 180
 gacctgctcc ccgggggtctc tcccgcaggc aggtctctc gccgagtctc cgaaaagggg
 240
 cggtcgtggc ggccctggcg cccagctggg caacgcttcg tggatatctca ccgcttctct
 300
 ctgttggtgcc cagcgccccg actgaagatc cggatcttca gtccttggcg cgc
 353

<210> 1790
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 1790
 Met His Thr Pro Ser Thr Tyr Ser His Thr Gln Thr Cys His Thr Pro
 1 5 10 15
 Pro Ser Pro His Thr Arg Thr Arg Pro Pro Pro Leu Ala Gly Thr His
 20 25 30
 Ala His Thr Arg Ala His Thr His Thr His Pro Gln Pro Gly Pro Ala

```

      35              40              45
Asp Leu Leu Pro Gly Val Ser Pro Ala Gly Arg Ser Pro Arg Arg Val
      50              55              60
Ser Glu Lys Gly Arg Ser Trp Arg Pro Trp Arg Pro Ala Gly Gln Arg
      65              70              75              80
Phe Val Val Ser His Arg Phe Ser Leu Leu Cys Pro Ala Pro Arg Leu
      85              90              95
Lys Ile Arg Ile Phe Ser Pro Trp Arg
      100              105

```

<210> 1791
 <211> 355
 <212> DNA
 <213> Homo sapiens

```

<400> 1791
aaatttcagt tagagattag ggaaaataaa gatgttattt tttcccatcc tagtttacag
60
accccccaga aaccactca tggattctcc cgagtctttg gacctggctc agacaccctt
120
gctttggatc aagccaatgc atgtatcccc taacacaccc atgctttatg tggtcctgc
180
ccctccctgc tcaggggact gcttggttaac ttcattgggt tggggacata tatattatg
240
gagagagaca gagaaaaaga aagagaggaa atgttattct ccttgtctgt atctgtatct
300
ccactccgat tccattccc tctgtgctc tctctctct cctcccttca cgcgt
355

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<210> 1792
 <211> 108
 <212> PRT
 <213> Homo sapiens

```

<400> 1792
Met Leu Phe Phe Pro Ile Leu Val Tyr Arg Pro Pro Arg Asn Pro Leu
1      5      10      15
Met Asp Ser Pro Glu Ser Leu Asp Leu Ala Gln Thr Pro Leu Leu Trp
20     25     30
Ile Lys Pro Met His Val Ser Pro Asn Thr Pro Met Leu Tyr Val Val
35     40     45
Pro Ala Pro Pro Cys Ser Gly Asp Cys Leu Leu Thr Ser Leu Gly Trp
50     55     60
Gly His Ile Tyr Tyr Arg Arg Glu Thr Glu Lys Lys Lys Glu Arg Lys
65     70     75     80
Cys Tyr Ser Pro Cys Leu Tyr Leu Tyr Leu His Ser Asp Ser His Ser
85     90     95
Leu Cys Cys Ser Pro Leu Ser Pro Pro Phe Thr Arg
100    105

```

<210> 1793
 <211> 510
 <212> DNA
 <213> Homo sapiens

<400> 1793

tgggttccag cccgtagatg accttggcct gggaggcctt ccgaaggcca cacccatata
 60
 cccccctcg gagctcctcg cttaccagtc gcccaaagag cttgtccccc cagcagccag
 120
 agtcagccag acccttagca aacaccatag gggtcacatc aatctcttct ccaacttcac
 180
 cttcttctct ggagatgaat cctgacaaca cctcagggct gaggcagaag tcggtggagg
 240
 ccgagccgtg ctcattgtgg atggtgcacc gatacacacc gcagtctacg ggggaggcct
 300
 gcacgatggc caaggccgcc ggccccctcat cccctgcgct cctgcccacc tcgcccactg
 360
 ggcgctgac cttggcccat gtcaagactg agtcactaag aatgttgaaa aactggcacc
 420
 acagcttcag gctaccggag gcatcaggaa actgctccac ccgaatcttc cggatcacct
 480
 gtggggcttt cagcaggtct ttggctttcc
 510

<210> 1794

<211> 116

<212> PRT

<213> Homo sapiens

<400> 1794

Met	Thr	Leu	Ala	Trp	Glu	Ala	Phe	Arg	Arg	Pro	His	Pro	Tyr	Pro	Pro
1				5					10				15		
Pro	Arg	Ser	Ser	Ser	Leu	Thr	Ser	Arg	Pro	Lys	Ser	Leu	Ser	Pro	Gln
		20						25				30			
Gln	Pro	Glu	Ser	Ala	Arg	Pro	Leu	Ala	Asn	Thr	Ile	Gly	Val	Ile	Ser
	35						40				45				
Ile	Ser	Ser	Pro	Thr	Ser	Pro	Ser	Ser	Leu	Glu	Met	Asn	Pro	Asp	Asn
	50					55				60					
Thr	Ser	Gly	Leu	Arg	Gln	Lys	Ser	Val	Glu	Ala	Glu	Pro	Cys	Ser	Leu
65				70				75				80			
Trp	Met	Val	His	Arg	Tyr	Thr	Pro	Gln	Ser	Thr	Gly	Glu	Ala	Cys	Thr
			85				90				95				
Met	Ala	Lys	Ala	Ala	Gly	Pro	Ser	Ser	Pro	Ala	Leu	Leu	Pro	Thr	Ser
		100					105				110				
Pro	Thr	Gly	Arg												
		115													

<210> 1795

<211> 386

<212> DNA

<213> Homo sapiens

<400> 1795

ctatgctctg agtcacttct ccaagcattc ctttctgttc ttccctccct gggctgatca
 60
 ttccaagaag tcctacattc cagaaaactt gagagggtgt tcttctctgg aagccccctt
 120

tcttttctgt gagctcaggg agcattctac atacctcagc tgtgtctgct atcttttctgt
 180
 taattatcaa tctttccata taaacagtaa aggaccacag tttattcatc agattcccca
 240
 tccaaacctg cacctgcata cataaacgca ctggataaat gtaccgcagt agacagaggg
 300
 tctccagggt gagagctcca tgagggcacc aatttttgtc tgtttagctg tgtcctcaaa
 360
 gcaaggaagg gttgatccgg tctaga
 386

<210> 1796
 <211> 86
 <212> PRT
 <213> Homo sapiens

<400> 1796
 Met Gln Val Gln Val Trp Met Gly Asn Leu Met Asn Lys Leu Trp Ser
 1 5 10 15
 Phe Thr Val Tyr Met Glu Arg Leu Ile Ile Lys Gln Lys Ile Ala Asp
 20 25 30
 Thr Ala Glu Val Cys Arg Met Leu Pro Glu Leu Thr Glu Lys Lys Arg
 35 40 45
 Gly Phe Gln Arg Arg Ser Thr Ser Gln Val Phe Trp Asn Val Gly Leu
 50 55 60
 Leu Glu Met Ile Ser Pro Gly Lys Glu Glu Gln Lys Gly Met Leu Gly
 65 70 75 80
 Glu Val Thr Gln Ser Ile
 85

<210> 1797
 <211> 348
 <212> DNA
 <213> Homo sapiens

<400> 1797
 aagcttcact atgttgccca ttccatgggc ggcgtgctgg tgcgtgacct gctggcggac
 60
 cggaatttgc cgaatgcatt gatcaggtca tctgtctggg ctgcgcgcag cagggtctgc
 120
 gtgccgctaa tttgttggcg ccatttgctg gcggcgcacg cgtaaatgg tgtatcacag
 180
 cgactatgtg atgccgcttg cgcacacgcc cggcagcgcg cggtggagcg ccatcaactc
 240
 acagatggac aacctggtgt tgccggtgac ctgcgcaatt ttaccgggaa tgacctatgt
 300
 ggcggtggat tacctggggc attgttcgtt attgtacagc ccacgcgt
 348

<210> 1798
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 1798

```

Met Gly Gly Val Leu Val Arg Asp Leu Leu Ala Asp Arg Asn Leu Pro
 1           5           10           15
Met Ser Leu Ile Arg Ser Ser Val Trp Ala Arg Arg Ser Arg Ala Arg
      20           25           30
Val Pro Leu Ile Cys Trp Arg His Leu Leu Ala Ala His Pro Ser Asn
      35           40           45
Gly Val Ser Gln Arg Leu Cys Asp Ala Ala Cys Ala His Ala Arg Gln
      50           55           60
Arg Ala Leu Glu Arg His Gln Leu Thr Asp Gly Gln Pro Gly Val Ala
      65           70           75           80
Gly Asp Leu Gly Asn Phe Thr Gly Asn Asp Pro Cys Gly Gly Gly Leu
      85           90           95
Pro Gly Ala Leu Phe Val Ile Val Gln Pro Thr Arg
      100           105

```

<210> 1799

<211> 366

<212> DNA

<213> Homo sapiens

<400> 1799

```

acgcgtcgcc tcctgctggt cgggattttc cttgctgtag ttaaccaaac caccggcgctc
60
aataccgtca tgtattacgc gcccaagggtg ttggagttcg caggaatgag caccaggcgc
120
tcgattattt cagaggtggc taatggagtc atgtctgtta ttggtgccgc tgcaggcttg
180
tggctcatcg aacggtttga tcgtcgtcac ctgcttatct tcgatgtcac ggcggtcggt
240
gtgtgtctcc ttggtattgc ggetactttc gggctggcaa ttgctcctca tgtgggtcaa
300
ggggtaccga agtgggcgcc tattctcgtg ctgcctctga tgagtatctt catgcttacc
360
gtgcac
366

```

<210> 1800

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1800

```

Thr Arg Arg Leu Leu Leu Val Gly Ile Phe Leu Ala Val Val Asn Gln
 1           5           10           15
Thr Thr Gly Val Asn Thr Val Met Tyr Tyr Ala Pro Lys Val Leu Glu
      20           25           30
Phe Ala Gly Met Ser Thr Gln Ala Ser Ile Ile Ser Glu Val Ala Asn
      35           40           45
Gly Val Met Ser Val Ile Gly Ala Ala Ala Gly Leu Trp Leu Ile Glu
      50           55           60
Arg Phe Asp Arg Arg His Leu Leu Ile Phe Asp Val Thr Ala Val Gly
      65           70           75           80
Val Cys Leu Leu Gly Ile Ala Ala Thr Phe Gly Leu Ala Ile Ala Pro

```

```

      85      90      95
His Val Gly Gln Gly Val Pro Lys Trp Ala Pro Ile Leu Val Leu Val
      100      105      110
Leu Met Ser Ile Phe Met Leu Ile Val His
      115      120

```

<210> 1801
 <211> 597
 <212> DNA
 <213> Homo sapiens

```

<400> 1801
aatttctcct tcggtgacta cttcaagaac gaggccattc agtacgcatg ggagctcgtc
60
actaagccgg cagaacaggg cggattgggt ttcgatcctg ccagcatctg ggtgacggtc
120
cttgacactg ggtttcaccc tgactatccg gagggcgaca ttgaggcgcg cgaggcgtgg
180
cgtgctgcgg gtatccctga cgagcagatt cagggtcgct cccttaagga caactactgg
240
catatggggg ttcccggccc cggcgggccc tgctcggaat tctacatcga tcgtggccca
300
gcctatggtc ccgacgggtg tccagaagca gatgaggacc gttaccttga gatctggaac
360
ctcgtattcg agaccgagga tctctcagcg gtgcgcgcta aagatgactt cgacatcgca
420
ggcccattgc gcagccttaa catcgacact ggtgccggtc tcgaacgtat tgcctaccta
480
ctccagggcg tcgacaatat gtacgagact gaccaggtat tccctgtcat tgagaaagcg
540
tccgagatgt cgggcaagcg gtacggcggt cggcacgacg acgacgtccg actacgc
597

```

<210> 1802
 <211> 199
 <212> PRT
 <213> Homo sapiens

```

<400> 1802
Asn Phe Ser Phe Gly Asp Tyr Phe Lys Asn Glu Ala Ile Gln Tyr Ala
1      5      10      15
Trp Glu Leu Val Thr Lys Pro Ala Glu Gln Gly Gly Leu Gly Phe Asp
      20      25      30
Pro Ala Ser Ile Trp Val Thr Val Leu Gly Pro Gly Phe His Pro Asp
      35      40      45
Tyr Pro Glu Gly Asp Ile Glu Ala Arg Glu Ala Trp Arg Ala Ala Gly
      50      55      60
Ile Pro Asp Glu Gln Ile Gln Gly Arg Ser Leu Lys Asp Asn Tyr Trp
65      70      75      80
His Met Gly Val Pro Gly Pro Gly Gly Pro Cys Ser Glu Ile Tyr Ile
      85      90      95
Asp Arg Gly Pro Ala Tyr Gly Pro Asp Gly Gly Pro Glu Ala Asp Glu
      100      105      110
Asp Arg Tyr Leu Glu Ile Trp Asn Leu Val Phe Glu Thr Glu Asp Leu

```

```

      115              120              125
Ser Ala Val Arg Ala Lys Asp Asp Phe Asp Ile Ala Gly Pro Leu Arg
      130              135              140
Ser Leu Asn Ile Asp Thr Gly Ala Gly Leu Glu Arg Ile Ala Tyr Leu
145              150              155              160
Leu Gln Gly Val Asp Asn Met Tyr Glu Thr Asp Gln Val Phe Pro Val
      165              170              175
Ile Glu Lys Ala Ser Glu Met Ser Gly Lys Arg Tyr Gly Val Arg His
      180              185              190
Asp Asp Asp Val Arg Leu Arg
      195

```

<210> 1803

<211> 708

<212> DNA

<213> Homo sapiens

<400> 1803

```

cccacaacga tggccgtcat ggtggatggg gaagtgcctg aggaggtcac acctaaggac
60
ctcctcctgg ccctcatctc cgagatcggc accggtgggg gacaagggtca tatggtcgag
120
tatcgcgggc aggccatcga gaagatgtcg atggagggtc gcatgacgat ctgcaatatg
180
tcgattgagt ggggagctcg cgtcggcatg gttgcttctg atgagaccac cttcacctac
240
ctcaaggatc gtccgcacgc tccgcgtggt gcacagtggg acaaggctgt cgcgactactg
300
cgcaactctg gtactgacga cgatgcgacc tttgacgctg agatccatgt ggacgcctcg
360
aatctcgccc ccttcgttac ctgggggtacc aaccgggggc agggatcccc cctaggcggt
420
gtggtgcccg ccgtcgaaga ctttgaggac gaggtagctc gcagcgcagc gtttgaggta
480
catggatttg accccgacga gatcggttcc cggtttgctg acatctttcg caataactct
540
gcgaacaacg gcttggtact ggctcaggtt gatcccaagg tcgtcggaga gttgtgggac
600
tttgccgagc agcatcctgg tgagcagctc accctctccc tcgagaatcg gacgattaac
660
cttcggggtc gcacgacctc cccgttccat attgatgacg tcacgcgt
708

```

<210> 1804

<211> 236

<212> PRT

<213> Homo sapiens

<400> 1804

```

Pro Thr Thr Met Ala Val Met Val Asp Gly Glu Val Pro Glu Glu Val
 1              5              10              15
Thr Pro Lys Asp Leu Ile Leu Ala Leu Ile Ser Glu Ile Gly Thr Gly
      20              25              30
Gly Gly Gln Gly His Met Val Glu Tyr Arg Gly Glu Ala Ile Glu Lys

```


ctggaagggtt cgatcgccgt cgctggatcg ctggtacagt ggctgcgga caacctcaag
 720
 atgttcgaga ccgccccgca aatcgaagcc ctgcgaaca ccgtcgagga caatgggtggc
 780
 gcctactttg tgccggcctt ctctggcctg ttgcggcgt actggcgctcc gga
 833

<210> 1806

<211> 277

<212> PRT

<213> Homo sapiens

<400> 1806

Xaa	Ala	Val	Val	Trp	Asp	Lys	Asn	Thr	Gly	Glu	Pro	Val	Tyr	Asn	Ala
1			5						10					15	
Ile	Val	Trp	Gln	Asp	Thr	Arg	Thr	Gln	Lys	Ile	Cys	Asn	Glu	Leu	Ala
			20					25					30		
Gly	Asp	Lys	Gly	Ala	Asp	Arg	Tyr	Lys	Glu	Ile	Cys	Gly	Leu	Gly	Leu
		35					40					45			
Ser	Thr	Tyr	Phe	Ser	Gly	Pro	Lys	Val	Lys	Trp	Ile	Leu	Asp	Asn	Val
	50				55					60					
Glu	Gly	Ala	Arg	Ala	Arg	Ala	Glu	Ala	Gly	Asp	Leu	Leu	Phe	Gly	Asn
65				70					75					80	
Met	Asp	Thr	Trp	Val	Leu	Trp	Asn	Leu	Thr	Gly	Gly	Thr	Asn	Gly	Gly
			85					90					95		
Val	His	Ile	Thr	Asp	Pro	Thr	Asn	Ala	Ser	Arg	Thr	Met	Leu	Met	Asp
			100					105					110		
Val	Arg	Lys	Leu	Gln	Trp	Asp	Asp	Ser	Met	Cys	Glu	Val	Met	Gly	Ile
	115					120					125				
Pro	Lys	Ser	Met	Leu	Pro	Glu	Ile	Lys	Ser	Ser	Ser	Glu	Ile	Tyr	Gly
	130					135					140				
Tyr	Gly	Arg	Lys	Asn	Gly	Leu	Leu	Ile	Asp	Thr	Pro	Ile	Ser	Gly	Ile
145				150					155					160	
Leu	Gly	Asp	Gln	Gln	Ala	Ala	Thr	Phe	Gly	Gln	Ala	Cys	Phe	Gln	Lys
			165					170					175		
Gly	Met	Ala	Lys	Asn	Thr	Tyr	Gly	Thr	Gly	Cys	Phe	Met	Leu	Met	Asn
		180					185					190			
Thr	Gly	Glu	Glu	Ala	Ile	Phe	Ser	Glu	Asn	Gly	Leu	Leu	Thr	Thr	Val
	195					200					205				
Cys	Tyr	Lys	Ile	Gly	Asp	Gln	Pro	Thr	Val	Tyr	Ala	Leu	Glu	Gly	Ser
	210				215						220				
Ile	Ala	Val	Ala	Gly	Ser	Leu	Val	Gln	Trp	Leu	Arg	Asp	Asn	Leu	Lys
225					230					235				240	
Met	Phe	Glu	Thr	Ala	Pro	Gln	Ile	Glu	Ala	Leu	Ala	Asn	Thr	Val	Glu
			245					250					255		
Asp	Asn	Gly	Gly	Ala	Tyr	Phe	Val	Pro	Ala	Phe	Ser	Gly	Leu	Phe	Ala
		260					265					270			
Pro	Tyr	Trp	Arg	Pro											
		275													

<210> 1807

<211> 420

<212> DNA

<213> Homo sapiens

<400> 1807

nnntatcggc aaggtggtcg aaatggctct tgactatgtc aacggtgaca cgtgcgccgc
60
gaccgccccca ttcatttgtc gtttgacgtc gacgcgatgg accctagcgt ggccccgagc
120
acaggcacac cgggtgcgtgg tggcttcaca ttccgagaag gccactacat atgcgagggc
180
gtagctgaga cgggctcgtt ggtggctatg gatatggtag aagtcaaccc ccattcttga
240
aagcatgcgg ctgagcagac gatcgccgtg ggttggtccc tcattcgttc ggcgctgggg
300
gagacgcttc tgtaatgggt gcatgatggg ccggtgggtcc atagccatgc atagacactc
360
cgggcgctga tatgatgagt gacatagcac gtacgataaa tctcggtttt gagcacgcgt
420

<210> 1808

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1808

His	Val	Arg	Arg	Asp	Arg	Pro	Ile	His	Leu	Ser	Phe	Asp	Val	Asp	Ala
1				5					10					15	
Met	Asp	Pro	Ser	Val	Ala	Pro	Ser	Thr	Gly	Thr	Pro	Val	Arg	Gly	Gly
			20					25					30		
Leu	Thr	Phe	Arg	Glu	Gly	His	Tyr	Ile	Cys	Glu	Ala	Val	Ala	Glu	Thr
		35				40						45			
Gly	Ser	Leu	Val	Ala	Met	Asp	Met	Val	Glu	Val	Asn	Pro	His	Leu	Glu
	50					55					60				
Lys	His	Ala	Ala	Glu	Gln	Thr	Ile	Ala	Val	Gly	Cys	Ser	Leu	Ile	Arg
65					70					75					80
Ser	Ala	Leu	Gly	Glu	Thr	Leu	Leu								
							85								

<210> 1809

<211> 340

<212> DNA

<213> Homo sapiens

<400> 1809

nnaccggtga tcgcatcggt gagcctcggc gcgatgcgcg tgttcgacct tcgccatcgc
60
cagaccggtg tcacgcatgc gtatgcctc gggcatggca gcctcctcgt gatgcggggc
120
cccaccagg ccgaatggca gcatcgctg ccgaaagcgc cgggtgtgca gggcgagcgc
180
gtgaacctga cgtttcggcg cgtgatgccg gtcggtatgg gccggtaaca accggcgctc
240
ccgaggtgcc cggatcgccg ggcgattcgc gccccgtttt cgcgattcat gcgcgatcga
300
tacgggcagg cggtcgcatg tgcggcacgt tgccgcacgn
340

<210> 1810
 <211> 75
 <212> PRT
 <213> Homo sapiens

<400> 1810
 Xaa Pro Val Ile Ala Ser Val Ser Leu Gly Ala Met Arg Val Phe Asp
 1 5 10 15
 Leu Arg His Arg Gln Thr Gly Val Thr His Ala Tyr Arg Leu Gly His
 20 25 30
 Gly Ser Leu Leu Val Met Arg Gly Pro Thr Gln Ala Glu Trp Gln His
 35 40 45
 Arg Val Pro Lys Ala Pro Gly Val Gln Gly Glu Arg Val Asn Leu Thr
 50 55 60
 Phe Arg Arg Val Met Pro Val Gly Met Gly Arg
 65 70 75

<210> 1811
 <211> 500
 <212> DNA
 <213> Homo sapiens

<400> 1811
 nnacgcgtgc taggaatagc catggactca tcatcagata catgctggat ttatacttca
 60
 ctgggtggat tgtatgagct gctcgtaaaa gatgaggctc gcgatatgtg gcatttgttg
 120
 ctgaaacggt gcgactttga gaaggcacta acattttgtc gtgatgagac gtgtcggaag
 180
 caggtactgg aaaagaaggg cgatgcactg ctacacgcag gtcagctcat ggaggccgctc
 240
 gagtgtctatg ctcaggccca gacaccggcc tttgaacagg ttgtgctttc tttgatggac
 300
 gtctgtgccg acaaggcatt gcgtcgatat gtcagactgc gtctcgacaa gatgccgaaa
 360
 caagctcgcg tgccctgtct catgctggct acttggtcctc ttgaattgta tgtggccgccc
 420
 attcaagcgc atgaaccac ctccgaacat tatcagacac ttttgctgga agcccaggag
 480
 acatttgagc ggcacatga
 500

<210> 1812
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 1812
 Xaa Arg Val Leu Gly Ile Ala Met Asp Ser Ser Ser Asp Thr Cys Trp
 1 5 10 15
 Ile Tyr Thr Ser Leu Gly Gly Leu Tyr Glu Leu Leu Val Lys Asp Glu
 20 25 30
 Ala Arg Asp Met Trp His Leu Leu Leu Lys Arg Cys Asp Phe Glu Lys

35	40	45
Ala Leu Thr Phe Cys Arg Asp Glu Thr Cys Arg Lys Gln Val Leu Glu		
50	55	60
Lys Lys Gly Asp Ala Leu Leu His Ala Gly Gln Leu Met Glu Ala Val		
65	70	75
Glu Cys Tyr Ala Gln Ala Gln Thr Pro Ala Phe Glu Gln Val Val Leu		
85	90	95
Ser Leu Met Asp Val Cys Ala Asp Lys Ala Leu Arg Arg Tyr Val Arg		
100	105	110
Leu Arg Leu Asp Lys Met Pro Lys Gln Ala Arg Val Pro Arg Leu Met		
115	120	125
Leu Ala Thr Trp Leu Ile Glu Leu Tyr Val Ala Ala Ile Gln Ala His		
130	135	140
Glu Pro Thr Ser Glu His Tyr Gln Thr Leu Leu Leu Glu Ala Gln Glu		
145	150	155
Thr Leu Glu Arg His His		160
165		

<210> 1813

<211> 426

<212> DNA

<213> Homo sapiens

<400> 1813

tctagagccg ttgtgatcgg tatccatggt tggatggggg tcatctcgat ggaggagtgt
60
gtcctgaggg gtggcagtga cctggtaggg gtgcctgcgg cgtcgcggct tgcgatcgct
120
ggttctcggg gatgactctc ggatgaatat agatctgcta agacgtcatt agattcgctt
180
ggcgcttggt tgggaacggg tgtgaagcag ccttctgatg gatgtatttt tgcgttggtg
240
aataaggttt caatattaat tgaatatggc gctagatgct ggtttaggat cagttgacgt
300
ccgctgtaga tcctccctat ggtcattctg gggccaggcg cttcgccagc tggccatcgc
360
aacaatggtg tggcgaaggg ttatgaggtg agtatggctg agcaagtcgt tggacaggcg
420
tctaca
426

<210> 1814

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1814

Met Thr Ile Gly Arg Ile Tyr Ser Gly Arg Gln Leu Ile Leu Asn Gln		
1	5	10
His Leu Ala Pro Tyr Ser Ile Asn Ile Glu Thr Leu Phe Asn Asn Ala		
20	25	30
Lys Ile His Pro Ser Glu Gly Cys Phe Thr Pro Val Pro Asn Gln Ala		
35	40	45
Pro Ser Glu Ser Asn Asp Val Leu Ala Asp Leu Tyr Ser Ser Glu Ser		

```

      50              55              60
His Pro Arg Glu Pro Ala Ile Ala Ser Arg Asp Ala Ala Gly Thr Pro
65              70              75              80
Thr Arg Ser Leu Pro Pro Leu Arg Thr His Ser Ser Ile Glu Met Asn
      85              90              95
Pro Ile Gln Pro Trp Ile Pro Ile Thr Thr Ala Leu
      100              105

```

<210> 1815
 <211> 303
 <212> DNA
 <213> Homo sapiens

```

<400> 1815
ggcgccacaca tggctacgct cgcaccgcgg cacaaggtaa gccgtagcgg cgggatacgag
60
cgccaggcgc cgcatactcg catggagcgc gatcagttcg gccatcatcg cgctcgtcggg
120
cgtgccgata tcgaggggca acgccgcgcc gagccgcgaa gccagatcgg gcagcgcgat
180
ccgccagcca tcggcaaatt cgcgagtgat gacgagcaag ggccgcctgg tctcctgcgc
240
ccggttccag cagtgaaca cgttcgctc gggcagacgg gcggcatcgg cgatcacggt
300
acc
303

```

<210> 1816
 <211> 98
 <212> PRT
 <213> Homo sapiens

```

<400> 1816
Met Ala Thr Leu Ala Pro Arg His Lys Val Ser Arg Ser Gly Gly Ile
1              5              10              15
Glu Arg Gln Ala Ala His Leu Gly Met Glu Arg Asp Gln Phe Gly His
      20              25              30
His Arg Val Val Gly Arg Ala Asp Leu Glu Gly Gln Arg Arg Ala Glu
      35              40              45
Pro Arg Ser Gln Ile Gly Gln Arg Asp Pro Pro Ala Ile Gly Lys Phe
      50              55              60
Ala Ser Asp Asp Glu Gln Gly Pro Pro Gly Leu Leu Arg Pro Val Pro
65              70              75              80
Ala Val Glu His Val Arg Leu Gly Gln Thr Gly Gly Ile Gly Asp His
      85              90              95
Gly Thr

```

<210> 1817
 <211> 413
 <212> DNA
 <213> Homo sapiens

<400> 1817

nncagcttgc aagaccgagg ccacacagtg tacatcttaa catcacattt cgatgcgtcg
 60
 catgcgcttg agccccacag cgatggcaca cttcagggtca ttcacgcaaa gacatggatc
 120
 ccgcgctcct tatttcacat gctgcatctg cgatggccat tcgcagcagt tttttctctt
 180
 gtgatgcagg tcgtggtagc agcgtatgga tcgtcactcg cagccactt gccgcatgtg
 240
 tacagggcgt gacgcatgtc ccgtcaaact cgctcccaga cgtgtttgtt attgaccaac
 300
 ttccagcagc gatacccta atcaaaactcc tgtgtgggag gcgtgtcatg tactactgtc
 360
 acttccctga caaagaaatc agcgtgctc tggctcgaca gcgaggcacg cgt
 413

<210> 1818

<211> 83

<212> PRT

<213> Homo sapiens

<400> 1818

Xaa	Ser	Leu	Gln	Asp	Arg	Gly	His	Thr	Val	Tyr	Ile	Leu	Thr	Ser	His
1				5					10					15	
Phe	Asp	Ala	Ser	His	Ala	Phe	Glu	Pro	Thr	Arg	Asp	Gly	Thr	Leu	Gln
		20						25				30			
Val	Ile	His	Ala	Lys	Thr	Trp	Ile	Pro	Arg	Ser	Leu	Phe	His	Met	Leu
	35					40					45				
His	Leu	Arg	Trp	Pro	Phe	Ala	Ala	Val	Phe	Ser	Leu	Val	Met	Gln	Val
	50			55						60					
Val	Val	Ala	Ala	Tyr	Gly	Ser	Ser	Leu	Ala	Arg	His	Leu	Pro	His	Val
65				70					75					80	
Tyr	Arg	Ala													

<210> 1819

<211> 343

<212> DNA

<213> Homo sapiens

<400> 1819

ggatccaaga gtggggcatc aggaacatgc catggttgctc gtggtgctgg aatgagaaca
 60
 atcacaagac agataggcct tggcatgac caacagatga acactgtttg ccctgaatgc
 120
 aaaggatcag gtgagatcat aagtgacaag gacaaatgcc caagctgtaa aggaaacaaa
 180
 gtagtccagg agaagaaggt gttagagggt catgtggaga aaggaatgca acataaccaa
 240
 aagattgtat tccagggtca ggctgatgaa gctcctgata cgggtacagg agacattggt
 300
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<210> 1820

<211> 114
 <212> PRT
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 35 40 45
 Asp Lys Asp Lys Cys Pro Ser Cys Lys Gly Asn Lys Val Val Gln Glu
 50 55 60
 Lys Lys Val Leu Glu Val His Val Glu Lys Gly Met Gln His Asn Gln
 65 70 75 80
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<210> 1821
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<210> 1822
 <211> 55
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<210> 1823

<211> 387

<212> DNA

<213> Homo sapiens

<400> 1823

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<210> 1824

<211> 129

<212> PRT

<213> Homo sapiens

<400> 1824

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Gln Gln Lys Arg Asp Pro Ala Pro Cys Glu Gln Ile Tyr Met Pro Gln
      35      40      45
Gly Lys Ala Gln Gly Phe Ser Val Leu Gln Asn Pro Arg Tyr Pro Tyr
      50      55      60
His Phe Ile Leu Val Pro Thr Ala Pro Leu Ser Gly Ile Glu Ser Pro
65      70      75      80
Leu Leu Leu Ala Gly Glu Arg Thr Asp Tyr Phe Gly Tyr Ala Trp Leu
      85      90      95
Met Arg Tyr Arg Leu Ala Ala Glu Tyr Gly Gly Pro Val Pro Asp Asp
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<210> 1825

<211> 413

<212> DNA

<213> Homo sapiens

<400> 1825

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 413

<210> 1826
 <211> 124
 <212> PRT
 <213> Homo sapiens

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 Trp Ala Pro Arg His His Val Ala Gly Arg His Gly His Val Gly Val
 35 40 45
 Val Pro Arg Tyr Ala Arg Pro Phe Leu Leu Ser Val Gly Leu Val Cys
 50 55 60
 Leu Glu Arg Asp Ala Trp Pro Thr Gly Thr Arg Cys Ile Gly Gly Leu
 65 70 75 80
 Pro Val Gly His Ala Ala Gly Ser Gly Leu Arg Cys Val Ala Asp Pro
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<210> 1827
 <211> 345
 <212> DNA
 <213> Homo sapiens

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 240
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<210> 1828
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 1828
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 20 25 30
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 35 40 45
 Gly Lys Ala Asn Arg Thr Ile Ser Ala Arg Lys Leu Tyr Ala Arg Met
 50 55 60
 Met Arg Thr Leu Ala Glu Thr Gly Asn Gly Trp Met Thr Phe Lys Asp
 65 70 75 80
 Lys Cys Asn Arg Ala Ser Asn Gln Thr Leu Arg Pro Gly Asn Val Ile
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 His Leu Ser Asn Leu Cys Thr Glu Ile Leu Glu Val Thr Ser Asn Asp
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 Glu Thr Ala
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<210> 1829
 <211> 4457
 <212> DNA
 <213> Homo sapiens

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<210> 1830

<211> 1377

<212> PRT

<213> Homo sapiens

<400> 1830

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Ser	Gln	Met	Pro	Lys	Glu	Ser	Ser	Pro	Asp	Asp	Asp	Val	Gln	Gln	Val
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Val	Phe	Asp	Leu	Ile	Cys	Lys	Val	Val	Ser	Gly	Leu	Glu	Val	Glu	Ser
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Ala	Ser	Val	Thr	Ser	Gln	Leu	Glu	Ile	Glu	Ala	Met	Pro	Pro	Lys	Cys
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Ser	Asp	Ile	Asp	Pro	Asp	Glu	Glu	Thr	Ile	Lys	Ile	Glu	Asp	Asp	Ser
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Ile	Arg	Gln	Ser	Gln	Asn	Ala	Leu	Leu	Ser	Asn	Glu	Ser	Ser	Gln	Phe
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Leu	Ser	Val	Ser	Ala	Glu	Gly	Gly	His	Glu	Cys	Val	Ala	Asn	Gly	Ile
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Ser	Arg	Asn	Ser	Ser	Ser	Pro	Cys	Ile	Ser	Gly	Thr	Thr	His	Thr	Leu
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His	Ser	Ser	Ile	Gln	Phe	Ser	Phe	Lys	Glu	Lys	Leu	Ser	Glu	Lys	Val
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Ser	Glu	Lys	Glu	Thr	Ile	Val	Lys	Glu	Ser	Gly	Lys	Gln	Pro	Gly	Ala
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Lys	Pro	Lys	Val	Lys	Leu	Ala	Arg	Lys	Lys	Asp	Asp	Lys	Lys	Lys	
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Ser	Ser	Asn	Glu	Lys	Leu	Lys	Gln	Thr	Ser	Val	Phe	Phe	Ser	Asp	Gly

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Asn Ile His Pro Leu Tyr Gln His Val Leu Leu Tyr Leu Gln Leu Tyr
          275          280          285
Asp Ser Ser Arg Thr Leu Tyr Ala Phe Ser Ala Ile Lys Ala Ile Leu
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Lys Thr Asn Pro Ile Ala Phe Val Asn Ala Ile Ser Thr Thr Ser Val
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Asn Asn Ala Tyr Thr Pro Gln Leu Ser Leu Leu Gln Asn Leu Leu Ala
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Val Asp Ser Asn His Asn Phe Arg Ser Ser Met Tyr Ile Glu Ile Leu
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Lys Val Thr Ala Gln Asp Leu Ile Gly Asn Arg Asn Met Gln Met Met
385          390          395          400
Ser Ile Glu Ile Leu Thr Leu Leu Phe Thr Glu Leu Ala Lys Val Ile
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Glu Ser Ser Ala Lys Gly Phe Pro Ser Phe Ile Ser Asp Met Leu Ser
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Lys Cys Lys Val Gln Lys Val Ile Leu His Cys Leu Leu Ser Ser Ile
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Phe Ser Ala Gln Lys Trp His Ser Glu Lys Met Ala Gly Lys Asn Leu
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Val Ala Val Glu Glu Gly Phe Ser Glu Asp Ser Leu Ile Asn Phe Ser
465          470          475          480
Glu Asp Glu Phe Asp Asn Gly Ser Thr Leu Gln Ser Gln Leu Leu Lys
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Ile Ser Pro His Gln Pro Met Thr Ser Leu Gln Tyr Leu His Ala Gln
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Pro Ile Thr Cys Gln Gly Met Phe Leu Cys Ala Val Ile Arg Ala Leu
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His Gln His Cys Ala Cys Lys Met His Pro Gln Trp Ile Gly Leu Ile
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Thr Ser Thr Leu Pro Tyr Met Gly Lys Val Leu Gln Arg Val Val Val
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Ser Val Thr Leu Gln Leu Cys Arg Asn Leu Asp Asn Leu Ile Gln Gln
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Tyr Lys Tyr Glu Thr Gly Leu Ser Asp Ser Arg Pro Leu Trp Met Ala
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Ser Ile Ile Pro Pro Asp Met Ile Leu Thr Leu Leu Glu Gly Ile Thr
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Leu Leu Val Ser Val Asp Gln Lys His Leu Phe Glu Ala Arg Ser Gly

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Ser	Ala	Ser	Leu	Thr	Thr	Ile	Asn	Leu	Gly	Ala	Thr	Lys	Asn	Leu	Arg							
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Thr	Val	Ile	Gln	Thr	Val	Lys	Glu	Val	Leu	Lys	Gln	Pro	Pro	Ala	Ile							
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Thr	Phe	Arg	Asp	Leu	Met	Thr	Arg	Val	Ala	Val	Ala	Gln	Ser	Ser	Ser							
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Leu	Asn	Leu	Phe	Ala	Asn	Arg	Asp	Val	Glu	Leu	Glu	Gln	Arg	Ala	Met							
		1075					1080					1085										
Leu	Leu	Lys	Arg	Leu	Ala	Phe	Ala	Ile	Phe	Ser	Ser	Glu	Ile	Asp	Gln							

1090 1095 1100
 Tyr Gln Lys Tyr Leu Pro Asp Ile Gln Glu Arg Leu Val Glu Ser Leu
 1105 1110 1115 1120
 Arg Leu Pro Gln Val Pro Thr Leu His Ser Gln Val Phe Leu Phe Phe
 1125 1130 1135
 Arg Val Leu Leu Leu Arg Met Ser Pro Gln His Leu Thr Ser Leu Trp
 1140 1145 1150
 Pro Thr Met Ile Thr Glu Leu Val Gln Val Phe Leu Leu Met Glu Gln
 1155 1160 1165
 Glu Leu Thr Ala Asp Glu Asp Ile Ser Arg Thr Ser Gly Pro Ser Val
 1170 1175 1180
 Ala Gly Leu Glu Thr Thr Tyr Thr Gly Gly Asn Gly Phe Ser Thr Ser
 1185 1190 1195 1200
 Tyr Asn Ser Gln Arg Trp Leu Asn Leu Tyr Leu Ser Ala Cys Lys Phe
 1205 1210 1215
 Leu Asp Leu Ala Leu Ala Leu Pro Ser Glu Asn Leu Pro Gln Phe Gln
 1220 1225 1230
 Met Tyr Arg Trp Ala Phe Ile Pro Glu Ala Ser Asp Asp Ser Gly Leu
 1235 1240 1245
 Glu Val Arg Arg Gln Gly Ile His Gln Arg Glu Phe Lys Pro Tyr Val
 1250 1255 1260
 Val Arg Leu Ala Lys Leu Leu Arg Lys Arg Ala Lys Lys Asn Pro Glu
 1265 1270 1275 1280
 Glu Asp Asn Ser Gly Arg Thr Leu Gly Trp Glu Pro Gly His Leu Leu
 1285 1290 1295
 Leu Thr Ile Cys Thr Val Arg Ser Met Glu Gln Leu Leu Pro Phe Phe
 1300 1305 1310
 Asn Val Leu Ser Gln Val Phe Asn Ser Lys Val Thr Ser Arg Cys Gly
 1315 1320 1325
 Gly His Ser Gly Ser Pro Ile Leu Tyr Ser Asn Ala Phe Pro Asn Lys
 1330 1335 1340
 Asp Met Lys Leu Glu Asn His Lys Pro Cys Ser Ser Lys Ala Arg Gln
 1345 1350 1355 1360
 Lys Ile Glu Glu Met Val Glu Lys Asp Phe Leu Glu Gly Met Ile Lys
 1365 1370 1375
 Thr

<210> 1831

<211> 508

<212> DNA

<213> Homo sapiens

<400> 1831

nntcatgaaa ggagaggccg tatgccatt gtcaaactca gtgcgcagtt cgtgcgcgaa
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 gcggtttgcc cgcccgaaa atccaaggtg gactattacg acaacgcact caaagggttc
 120
 atcctggagg ctgcaccttc aggtggcaaa accttttacc tgcgctatca cgacagccac
 180
 ggcaagctgc gccaatgcaa gatcggtgat gctgctgcgg tcagctacga caaggcccgg
 240
 cagaaggcca tgcggttgcg ttggaaggtg gaatgggggg gcaatccatt ggaggagcgc
 300

caagccttgc gtgcggtacc gaccctggcc gagttcatcc gcgagaccta tgtgccgcac
 360
 atccacctgc accggaggaa ttttcagtcc acgctgagct tcctcaagtg ccatgtcctg
 420
 ccgcgctttg gagccaagca cctggacgaa atcacgacca acatgctggc cgaggctcac
 480
 caggatctgc gcacgaaggg ctacgcgt
 508

<210> 1832
 <211> 169
 <212> PRT
 <213> Homo sapiens

<400> 1832
 Xaa His Glu Arg Arg Gly Arg Met Pro Ile Val Lys Leu Ser Ala Gln
 1 5 10 15
 Phe Val Arg Glu Ala Val Cys Pro Pro Gly Lys Ser Lys Val Asp Tyr
 20 25 30
 Tyr Asp Asn Ala Leu Lys Gly Phe Ile Leu Glu Ala Arg Pro Ser Gly
 35 40 45
 Gly Lys Thr Phe Tyr Leu Arg Tyr His Asp Ser His Gly Lys Leu Arg
 50 55 60
 Gln Cys Lys Ile Gly Asp Ala Ala Ala Val Ser Tyr Asp Lys Ala Arg
 65 70 75 80
 Gln Lys Ala Met Arg Leu Arg Trp Lys Val Glu Trp Gly Gly Asn Pro
 85 90 95
 Leu Glu Glu Arg Gln Ala Leu Arg Ala Val Pro Thr Leu Ala Glu Phe
 100 105 110
 Ile Arg Glu Thr Tyr Val Pro His Ile His Leu His Arg Arg Asn Phe
 115 120 125
 Gln Ser Thr Leu Ser Phe Leu Lys Cys His Val Leu Pro Arg Phe Gly
 130 135 140
 Ala Lys His Leu Asp Glu Ile Thr Thr Asn Met Leu Ala Glu Ala His
 145 150 155 160
 Gln Asp Leu Arg Thr Lys Gly Tyr Ala
 165

<210> 1833
 <211> 430
 <212> DNA
 <213> Homo sapiens

<400> 1833
 acgcgtgcga tggtgaagga gcgcttcggc atcgggcatg cgacgctgca ggttgaactg
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 tccggtgccg aggcagacga tgccgaggcg ggcggctgct aagggtcgcc gtcgttcagt
 120
 ggcgcaaagc ggcatgata gcgtcgaaca gcgttactcc agccagcggg ccaaccaaca
 180
 gcataccag gttgaaaccg atgatccacg ccgcgatgct ttctcggcgc gggtttggca
 240
 gcggcttggg ctcggttcc cagcgttccg gcggcgccca gccattttgg aaatcgacga
 300

acatctccgg cgctcctgct gtcaggcgct gaaggtatcg aaagtcatgc gccgtgacaa
 360
 aggaagatcg gcgacacagg agccgaagcg ccgccgcctg caataagcgc gcgcgatcgc
 420
 aattgtcggg
 430

<210> 1834

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1834

Met	Arg	Arg	Cys	Arg	Leu	Asn	Cys	Pro	Val	Pro	Arg	Gln	Thr	Met	Pro
1			5					10					15		
Arg	Arg	Ala	Ala	Ala	Lys	Gly	Arg	Arg	Ser	Val	Ala	Gln	Ser	Gly	
		20					25				30				
Asp	Asp	Arg	Val	Glu	Gln	Arg	Tyr	Ser	Ser	Gln	Arg	Ala	Asn	Gln	Gln
	35					40				45					
His	His	Gln	Val	Glu	Thr	Asp	Asp	Pro	Arg	Arg	Asp	Ala	Phe	Ser	Ala
	50				55					60					
Arg	Val	Trp	Gln	Arg	Leu	Gly	Leu	Gly	Phe	Pro	Ala	Phe	Arg	Arg	Arg
65				70				75					80		
Pro	Ala	Ile	Leu	Glu	Ile	Asp	Glu	His	Leu	Arg	Arg	Ser	Cys	Cys	Gln
			85			90				95					
Ala	Leu	Lys	Val	Ser	Lys	Val	Met	Arg	Asp	Lys	Gly	Arg	Ser	Ala	
		100				105				110					
Thr	Gln	Glu	Pro	Lys	Arg	Arg	Arg	Leu	Gln						
	115					120									

<210> 1835

<211> 677

<212> DNA

<213> Homo sapiens

<400> 1835

nataactcaag gactttgacg gcacccgagc ccggttgctc cctgaggcca tcatgaaccc
 60
 cccagtggca ccctatgcta ctgtggcacc cagcacttta gcccaccccc aggcccaggc
 120
 tctggcccg cagcaggccc tgcagcatgc acagaccctg gcccatgccc ctccccagac
 180
 gctgcagcac cctcagggtta tcccgccacc ccaggcactg tcccaccctc agagcctcca
 240
 gcagcctcag ggcttgggcc accctcagcc catggcccaa acccaggggt tgggccaccc
 300
 tcaggccctg gctcaccagg gtctccagca cccccacaat cccttgctgc atggaggccg
 360
 gaagatgcca gactcagatg ccccccgaa tgtgaccgtg tctacctcaa ctatccccct
 420
 ttcaatggcg gccactctgc agcacagcca gcctccggac ctgagtagca tcgtgcacca
 480
 gatcaaccag ttttgccaga cgagggcagg catcagcact acctcagtgt gtgagggcca
 540

gacgcgccaac cccagcccca ttagtcgcag tctgtctatc aatgcaagca cccgggtgtc
 600
 gacccacagc gtccccacac caatgccttc atgtgtggtc aatcccatgg agcacacca
 660
 cgcggccacc gccgcgg
 677

<210> 1836
 <211> 140
 <212> PRT
 <213> Homo sapiens

<400> 1836
 Gly His His Glu Pro Pro Ser Gly Thr Leu Cys Tyr Cys Gly Thr Gln
 1 5 10 15
 His Phe Ser Pro Pro Pro Gly Pro Gly Ser Gly Pro Pro Ala Gly Pro
 20 25 30
 Ala Ala Cys Thr Asp Pro Gly Pro Cys Pro Ser Pro Asp Ala Ala Ala
 35 40 45
 Pro Ser Gly Tyr Pro Ala Thr Pro Gly Thr Val Pro Pro Ser Glu Pro
 50 55 60
 Pro Ala Ala Ser Gly Pro Gly Pro Pro Ser Ala His Gly Pro Asn Pro
 65 70 75 80
 Gly Leu Gly Pro Pro Ser Gly Pro Gly Ser Pro Gly Ser Pro Ala Pro
 85 90 95
 Pro Gln Ser Leu Ala Ala Trp Arg Pro Glu Asp Ala Arg Leu Arg Cys
 100 105 110
 Pro Pro Glu Cys Asp Arg Val Tyr Leu Asn Tyr Pro Pro Phe Asn Gly
 115 120 125
 Gly His Ser Ala Ala Gln Pro Ala Ser Gly Pro Glu
 130 135 140

<210> 1837
 <211> 564
 <212> DNA
 <213> Homo sapiens

<400> 1837
 nntctagaac actctgcccc tgaatctgta ccgggattgt ttggcccgtc acgaactcgt
 60
 acgggtcgata tcaatatcac tgggttttct tcacagtatt taccgcccc ctatggacca
 120
 attgtgcgg acgtcaaaca aacctgggcg tgggaccac aggatctgac gattgtctca
 180
 acttctgctg atcacgacca taacctccga tatgcagtac agcatttcgg cgcaagcccg
 240
 accccgatcc agtaaccttc gataacgcga aagccggcac cccacataac tcgngtgtac
 300
 accgaagtcc ctgccaacgt tccatccgac ataggggagt taactaacg aattatcaag
 360
 gggaaatcta cccccgtaac caaggccatc gcgattcaaa actggcttcg tgacagcgct
 420
 cgattccatt acgacatcaa cgcacccgaa ggtgacggct atcaggtact ggaaaacttc
 480

ctgctgcaca cccaccgcgg ttattgcac catttcgcgg cgtcaatggc actcatggca
 540
 cgacttgaag gtattccgtc acgc
 564

<210> 1838
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 1838
 Xaa Leu Glu His Ser Ala Pro Glu Ser Val Pro Gly Leu Phe Gly Pro
 1 5 10 15
 Ser Arg Thr Arg Thr Val Asp Ile Asn Ile Thr Gly Phe Ser Ser Gln
 20 25 30
 Tyr Leu Pro Ala Pro Tyr Gly Pro Ile Ala Ala Asp Val Lys Gln Thr
 35 40 45
 Trp Ala Trp Asp Pro Gln Asp Leu Thr Ile Val Ser Thr Ser Ala Asp
 50 55 60
 His Asp His Asn Leu Arg Tyr Ala Val Gln His Phe Gly Ala Ser Pro
 65 70 75 80
 Thr Pro Ile Gln

<210> 1839
 <211> 300
 <212> DNA
 <213> Homo sapiens

<400> 1839
 ncaatacggc tgaacaccgc tgatatacc cgtactttcc cgtcaacgg aaaattttcc
 60
 gaagttcagg caaaggctta tcaggcgggtg ctggacgctg cagatgcggc atttaaggca
 120
 gccgttcctg gcaataaatt ccgcgacgtc catgctgcag cgatgaatgt tctcgctcc
 180
 cgccttgagg actgggggct tatgccggtc agcgcgaagg tcgctctttc ggacgagggc
 240
 gggcaacacc gtcgttggat gccgcacggc accagccacc atctagggct ggatgtgcac
 300

<210> 1840
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 1840
 Xaa Ile Arg Leu Asn Thr Ala Asp Ile Thr Arg Thr Phe Pro Val Asn
 1 5 10 15
 Gly Lys Phe Ser Glu Val Gln Ala Lys Ala Tyr Gln Ala Val Leu Asp
 20 25 30
 Ala Ala Asp Ala Ala Phe Lys Ala Ala Val Pro Gly Asn Lys Phe Arg
 35 40 45
 Asp Val His Ala Ala Ala Met Asn Val Leu Ala Ser Arg Leu Glu Asp

50 55 60
 Trp Gly Leu Met Pro Val Ser Ala Lys Val Ala Leu Ser Asp Glu Gly
 65 70 75 80
 Gly Gln His Arg Arg Trp Met Pro His Gly Thr Ser His His Leu Gly
 85 90 95
 Leu Asp Val His
 100

<210> 1841
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1841
 nnctccaaga acgtcccgga gtggggcccc agggcgctcg aactccccgg cgggcccggg
 60
 gtcgatccgg tggtcgagat cggcgggtccc ggtacgctag cccaatcgat ggtcgccccg
 120
 cgcgtcggcg cccatgtcgc cttgatcggc gtgcttnacg gggattgtcg ggcggtgagg
 180
 acggcgctgc tgatgagcaa gaatctgcgc gtgcaagggc tgccgggtcgg cagccgcgcg
 240
 cagcaactcg cgatgatcgc gggggtcgag gcgaacggca tccgtccgat cctcgaccag
 300
 catttcccgc tcgaaaatct ccccgacgcg
 330

<210> 1842
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1842
 Xaa Ser Lys Asn Val Pro Glu Trp Gly Pro Arg Ala Leu Glu Leu Pro
 1 5 10 15
 Gly Gly Pro Gly Val Asp Pro Val Val Glu Ile Gly Gly Pro Gly Thr
 20 25 30
 Leu Ala Gln Ser Met Val Ala Pro Arg Val Gly Ala His Val Ala Leu
 35 40 45
 Ile Gly Val Leu Xaa Gly Asp Cys Arg Ala Val Arg Thr Ala Leu Leu
 50 55 60
 Met Ser Lys Asn Leu Arg Val Gln Gly Leu Pro Val Gly Ser Arg Ala
 65 70 75 80
 Gln Gln Leu Ala Met Ile Ala Gly Val Glu Ala Asn Gly Ile Arg Pro
 85 90 95
 Ile Leu Asp Gln His Phe Pro Leu Glu Asn Leu Pro Asp Ala
 100 105 110

<210> 1843
 <211> 473
 <212> DNA
 <213> Homo sapiens

<400> 1843

aagctttggc atctccagca aaagatgtgc tatttactga taccatcacc atgaaggcca
 60
 acagttttga gtccagatta acaccaagca ggttcacgaa agccttaagt tatgcatcat
 120
 tagataaaga agattttattg agtcctatta atcaaaatac cctgcaacga tcttcctcag
 180
 tgcggtccat ggtgtccagt gccacatatg ggggttcaga tgattacatt ggtcttgctc
 240
 tcccggtgga tataaatgat atattccagg taaaggatat tccctatfff cagacaaaaa
 300
 acataccacc acatgatgat cgaggtgcaa gagcatttgc ccatgatgca ggaggtcttc
 360
 catctggaac tggaggtctt gtaaaaaatt cttttcactt gctacgacag cagatgagtc
 420
 ttacggaaat aatgaattca atccattcag atgcctctcn cnnccnccccc ccc
 473

<210> 1844

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1844

Met	Lys	Ala	Asn	Ser	Phe	Glu	Ser	Arg	Leu	Thr	Pro	Ser	Arg	Phe	Met
1			5					10					15		
Lys	Ala	Leu	Ser	Tyr	Ala	Ser	Leu	Asp	Lys	Glu	Asp	Leu	Leu	Ser	Pro
		20					25					30			
Ile	Asn	Gln	Asn	Thr	Leu	Gln	Arg	Ser	Ser	Ser	Val	Arg	Ser	Met	Val
	35					40					45				
Ser	Ser	Ala	Thr	Tyr	Gly	Gly	Ser	Asp	Asp	Tyr	Ile	Gly	Leu	Ala	Leu
	50				55					60					
Pro	Val	Asp	Ile	Asn	Asp	Ile	Phe	Gln	Val	Lys	Asp	Ile	Pro	Tyr	Phe
65			70					75				80			
Gln	Thr	Lys	Asn	Ile	Pro	Pro	His	Asp	Asp	Arg	Gly	Ala	Arg	Ala	Phe
		85					90				95				
Ala	His	Asp	Ala	Gly	Gly	Leu	Pro	Ser	Gly	Thr	Gly	Gly	Leu	Val	Lys
		100					105				110				
Asn	Ser	Phe	His	Leu	Leu	Arg	Gln	Gln	Met	Ser	Leu	Thr	Glu	Ile	Met
	115					120					125				
Asn	Ser	Ile	His	Ser	Asp	Ala	Ser	Xaa	Xaa	Xaa	Xaa	Pro			
	130					135					140				

<210> 1845

<211> 390

<212> DNA

<213> Homo sapiens

<400> 1845

aagcttacga cgcctagctt tggagacctg aaccacttga tcagtgcac aatgagtggg
 60
 gtgacttgct gcctccgctt cccggggcag ctcaactcgg accttcggaa acttgacgtg
 120
 aacctgattc cattccctcg cctgcacttt tttatggctg gctttgcgcc actcacctcg
 180

cgtggctccc agcagtaccg tgctctcact gtccctgagc tgaccagca gatgtgggac
 240
 tccaagaaca tgatgtgtgc tgctgacctg cgctcatggcc gctacctcac agtatctgcc
 300
 atgttccgtg gaaagatgag caccaaggag gtggacgagc agatgctgaa cgtgcagaac
 360
 aagaactctt cctacttcgt ggagtggatc
 390

<210> 1846
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 1846
 Lys Leu Thr Thr Pro Ser Phe Gly Asp Leu Asn His Leu Ile Ser Ala
 1 5 10 15
 Thr Met Ser Gly Val Thr Cys Cys Leu Arg Phe Pro Gly Gln Leu Asn
 20 25 30
 Ser Asp Leu Arg Lys Leu Ala Val Asn Leu Ile Pro Phe Pro Arg Leu
 35 40 45
 His Phe Phe Met Val Gly Phe Ala Pro Leu Thr Ser Arg Gly Ser Gln
 50 55 60
 Gln Tyr Arg Ala Leu Thr Val Pro Glu Leu Thr Gln Gln Met Trp Asp
 65 70 75 80
 Ser Lys Asn Met Met Cys Ala Ala Asp Pro Arg His Gly Arg Tyr Leu
 85 90 95
 Thr Val Ser Ala Met Phe Arg Gly Lys Met Ser Thr Lys Glu Val Asp
 100 105 110
 Glu Gln Met Leu Asn Val Gln Asn Lys Asn Ser Ser Tyr Phe Val Glu
 115 120 125
 Trp Ile
 130

<210> 1847
 <211> 343
 <212> DNA
 <213> Homo sapiens

<400> 1847
 cagccgtgct ttctgcgctc aactcgggaa cggctatata gcgcagatcc aacagttcca
 60
 tggctcgaag agtagtaaaa atatcaataa ctggcagagc atcgcgctcaa gctggcgacc
 120
 ctggccgccc ccgcgttggc cgatcacgcc atgttggagc aggccttcca gctgttccag
 180
 caaaaaagtt ggggacaatc ttctgccgga tggctcgggtg ttcgacttca gggagcgcca
 240
 tgcactgcac tacgtcgtct atgacctgga gccgctgggt caggcggccc tggcgggcaa
 300
 gccctaacgg tggcaactgg ctgacttaca ccgccccac cgn
 343

<210> 1848

<211> 94
 <212> PRT
 <213> Homo sapiens

<400> 1848
 Met Ala Arg Arg Val Val Lys Ile Ser Ile Thr Gly Arg Ala Ser Arg-
 1 5 10 15
 Gln Ala Gly Asp Pro Gly Arg Arg Arg Val Gly Arg Ser Arg His Val
 20 25 30
 Gly Ala Gly Leu Pro Ala Val Pro Ala Lys Lys Leu Arg Thr Ile Ser
 35 40 45
 Cys Arg Met Ala Arg Cys Ser Thr Ser Gly Ser Ala Met His Cys Thr
 50 55 60
 Thr Ser Ser Met Thr Trp Ser Arg Trp Phe Arg Arg Pro Trp Arg Ala
 65 70 75 80
 Ser Pro Asn Gly Gly Asn Trp Leu Thr Tyr Thr Ala Pro Thr
 85 90

<210> 1849
 <211> 390
 <212> DNA
 <213> Homo sapiens

<400> 1849
 cggaaagaac aggttcagca aagagcaata gaatgttccc gggctctcag tgcgattctt
 60
 gacattgaac atggagaccc aaaagagaat gtactaggtt cagcttttga catgaaacag
 120
 ctgaaggatg ctattgatga gactaaaata gctttgatgg gacattcttt tggaggagca
 180
 acagttcttc aagcccttag tgaggaccag agattcagat gtggagttgc tcttgatcca
 240
 tggatgtatc cggatgaacga agagctgtac tccagaaccc tccagcctct cctctttatc
 300
 aactctgcca aattccagac tccaaaggac atcgcaaaaa tgaaaaagtt ctaccagcct
 360
 gacaaggaaa ggaaanatga ttacaatcaa
 390

<210> 1850
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 1850
 Arg Lys Glu Gln Val Gln Gln Arg Ala Ile Glu Cys Ser Arg Ala Leu
 1 5 10 15
 Ser Ala Ile Leu Asp Ile Glu His Gly Asp Pro Lys Glu Asn Val Leu
 20 25 30
 Gly Ser Ala Phe Asp Met Lys Gln Leu Lys Asp Ala Ile Asp Glu Thr
 35 40 45
 Lys Ile Ala Leu Met Gly His Ser Phe Gly Gly Ala Thr Val Leu Gln
 50 55 60
 Ala Leu Ser Glu Asp Gln Arg Phe Arg Cys Gly Val Ala Leu Asp Pro

65					70					75				80	
Trp	Met	Tyr	Pro	Val	Asn	Glu	Glu	Leu	Tyr	Ser	Arg	Thr	Leu	Gln	Pro
				85					90					95	
Leu	Leu	Phe	Ile	Asn	Ser	Ala	Lys	Phe	Gln	Thr	Pro	Lys	Asp	Ile	Ala
			100					105					110		
Lys	Met	Lys	Lys	Phe	Tyr	Gln	Pro	Asp	Lys	Glu	Arg	Lys	Xaa	Asp	Tyr
		115					120					125			
Asn	Gln														
	130														

<210> 1851

<211> 574

<212> DNA

<213> Homo sapiens

<400> 1851

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ncgatcggag aggcctttccg cactggtgac ttggactcta agcccgaccc cagccggagc
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ttcaggcctt accgagctga agacaatgat tcctatgcct ctgagatcaa ggagctgcag
120
ctggtgctgg ctgaggccca cgacagcctc cggggcttgc aagagcagct ctcccaggag
180
cggcagctac gaaaggagga ggccgacaat ttcaaccaga aaatggtcca gctgaaggag
240
gaccagcaga gggcgctcct gaggcgggag tttgagctgc agagtctgag cctccagcgg
300
aggtctggagc agaaattctg gagccaggag aagaacatgc tgggtgcagga gtcccagcaa
360
ttcaagcaca acttctctgct gctcttcatg aagctcaggt gggttcctcaa gcgctggcgg
420
cagggcaagg ttttgcccag cgaaggggat gacttcctcg aggtgaacag catgaaggac
480
ctgtacttgc tgatggagga agacgagata aacgctcagc attctgataa caaggcctgc
540
acgggggaca gctggaccca gaacacgccc aatg
574

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<210> 1852

<211> 191

<212> PRT

<213> Homo sapiens

<400> 1852

Xaa	Ile	Gly	Glu	Ala	Phe	Arg	Thr	Gly	Asp	Leu	Asp	Ser	Lys	Pro	Asp
1				5				10					15		
Pro	Ser	Arg	Ser	Phe	Arg	Pro	Tyr	Arg	Ala	Glu	Asp	Asn	Asp	Ser	Tyr
			20					25				30			
Ala	Ser	Glu	Ile	Lys	Glu	Leu	Gln	Leu	Val	Leu	Ala	Glu	Ala	His	Asp
		35				40					45				
Ser	Leu	Arg	Gly	Leu	Gln	Glu	Gln	Leu	Ser	Gln	Glu	Arg	Gln	Leu	Arg
	50				55					60					
Lys	Glu	Glu	Ala	Asp	Asn	Phe	Asn	Gln	Lys	Met	Val	Gln	Leu	Lys	Glu
65					70				75					80	
Asp	Gln	Gln	Arg	Ala	Leu	Leu	Arg	Arg	Glu	Phe	Glu	Leu	Gln	Ser	Leu

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<400> 1854
Met  Pro  His  Pro  Pro  Trp  Lys  Arg  Cys  Arg  Ser  Ala  Thr  Ser  Leu  Arg
 1              5              10              15
Ser  Ala  Pro  Ser  Lys  Leu  Thr  Cys  Ser  Ser  Ala  Arg  Ser  Ile  His  Ser
          20              25              30
Ser  Leu  Arg  Arg  Ala  Trp  His  Phe  Cys  Ala  Ser  Arg  Thr  Thr  Trp  Met
          35              40              45
Ala  Arg  Ser  Ala  Arg  Arg  Phe  Thr  Trp  Met  Thr  Met  Ser  Phe  Leu  Ser
          50              55              60
Arg  His  Arg  Ser  Ser  Ala  Gln  Pro  Arg  Ala  Ser  Asp  Ser  Asn  Thr  Ser
65              70              75              80
Pro  Ser  Leu  Trp  Pro  Ser  Cys  Ser  Ser  Ala  Leu  Leu  His  Arg  Ile  His
          85              90              95
Ile  Pro  Lys  Leu
          100

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<210> 1855
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 1855
 gcgtccttcg cgtacgtgga cgagggcggg caggtgttcg tccagtgcag caccagcac
 60
 ccgagcgaaa cgcaggaaat cgtggcgcac gtctggacc tggacaacca cgaggtcacg
 120
 gtgcagtgtc tgcgcatggg cgggtggcttt ggcggttaagg aaatgcagcc gcacgggttc
 180
 gccgcgatcg cagcactcgg cgcgaccctg accgggcgac cggttcgact gcgactgacc
 240
 cgaaaccagg acatcaccat ctccgaaaag cgccacccat acctcgcgga gtgggacgtg
 300
 gccttcgacg acgacggccg cctccaggct ctgcgcgcca ccgtcaccag cgacggcggg
 360
 tggagcctgg acctctcgga gccggtgatg cagcggacgg tgtgtcacat cgataactcc
 420
 tattggatc
 429

<210> 1856
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 1856
 Ala Ser Phe Ala Tyr Val Asp Glu Gly Gly Gln Val Phe Val Gln Cys
 1 5 10 15
 Ser Thr Gln His Pro Ser Glu Thr Gln Glu Ile Val Ala His Val Leu
 20 25 30
 Asp Leu Asp Asn His Glu Val Thr Val Gln Cys Leu Arg Met Gly Gly
 35 40 45
 Gly Phe Gly Gly Lys Glu Met Gln Pro His Gly Phe Ala Ala Ile Ala
 50 55 60
 Ala Leu Gly Ala Thr Leu Thr Gly Arg Pro Val Arg Leu Arg Leu Thr
 65 70 75 80
 Arg Asn Gln Asp Ile Thr Ile Ser Gly Lys Arg His Pro Tyr Leu Ala
 85 90 95
 Glu Trp Asp Val Ala Phe Asp Asp Asp Gly Arg Leu Gln Ala Leu Arg
 100 105 110
 Ala Thr Val Thr Ser Asp Gly Gly Trp Ser Leu Asp Leu Ser Glu Pro
 115 120 125
 Val Met Gln Arg Thr Val Cys His Ile Asp Asn Ser Tyr Trp Ile
 130 135 140

<210> 1857
 <211> 393
 <212> DNA
 <213> Homo sapiens

<400> 1857

gtgcacgccg ctgccccagc cgtcgccctac cgatcaacag acgcagccgc cgtgcgttga
 60
 gataccagcc gagcacgac atgctcagca tggtcagcag cagccagaac ggaaatcgca
 120
 gcaggcgctc gaacagctca ctgccaccca gcaccagcgg gattgccccg gccacgacca
 180
 gtgcgccgag gagcagccac catcgccccg tcatgctgcg gactcgata ccaatacgtt
 240
 gcgcttcaac caatcgatct tggtcgaggc atgccgccc tcttccaaca ggcgagtcac
 300
 cagactcagc cagtaacacc gcgaaaaatc gtggcgcatg tcgacagggt gcaaaccgag
 360
 acgcagcacg ggtgcctgtc ggtggcgggc gag
 393

<210> 1858
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1858
 Met Leu Ser Met Val Ser Ser Ser Gln Asn Gly Asn Arg Ser Arg Arg
 1 5 10 15
 Ser Asn Ser Ser Leu Pro Pro Ser Thr Ser Gly Ile Ala Pro Ala Thr
 20 25 30
 Thr Ser Ala Pro Arg Ser Ser His His Arg Pro Leu Met Leu Arg His
 35 40 45
 Ser Ile Pro Ile Arg Cys Ala Ser Thr Asn Arg Ser Trp Ser Arg His
 50 55 60
 Ala Ala His Leu Pro Thr Gly Glu Ser Pro Asp Ser Ala Ser Asn Thr
 65 70 75 80
 Ala Lys Asn Arg Gly Ala Cys Arg Gln Gly Ala Asn Arg Asp Ala Ala
 85 90 95
 Arg Val Pro Val Gly Gly Gly Arg
 100

<210> 1859
 <211> 345
 <212> DNA
 <213> Homo sapiens

<400> 1859
 nagatctggc gcctcgctcac caacttcctc tacttccgca agatggattt ggattttctg
 60
 ttccacatgt tttttctcgc acgatactgc aagcttctgg aggagaactc atttagagga
 120
 agaactgccg acttttttta catgctcttg tttggtgcta ctgtcctaac tagcattggt
 180
 ctgacggag ggatgatacc ttacatttcc gagacatttg ccagaattct gttcctgagc
 240
 aattcattga cgtttatgat ggtttatgtc tggagcaagc acaatcctat catccatag
 300
 agcaatctgg gcctgttcac ctttacggct gcatacttac catgg
 345

<210> 1860
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 1860
 Xaa Ile Trp Arg Leu Val Thr Asn Phe Leu Tyr Phe Arg Lys Met Asp
 1 5 10 15
 Leu Asp Phe Leu Phe His Met Phe Phe Leu Ala Arg Tyr Cys Lys Leu
 20 25 30
 Leu Glu Glu Asn Ser Phe Arg Gly Arg Thr Ala Asp Phe Phe Tyr Met
 35 40 45
 Leu Leu Phe Gly Ala Thr Val Leu Thr Ser Ile Val Leu Ile Gly Gly
 50 55 60
 Met Ile Pro Tyr Ile Ser Glu Thr Phe Ala Arg Ile Leu Phe Leu Ser
 65 70 75 80
 Asn Ser Leu Thr Phe Met Met Val Tyr Val Trp Ser Lys His Asn Pro
 85 90 95
 Ile Ile His Met Ser Asn Leu Gly Leu Phe Thr Phe Thr Ala Ala Tyr
 100 105 110
 Leu Pro Trp
 115

<210> 1861
 <211> 435
 <212> DNA
 <213> Homo sapiens

<400> 1861
 gcggttgactg tagtgagtga cgaagctgat atacaaaatg cgccgggctg tagaaaagcc
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 aatagtgagc ttcattcagt cggcttaggt gttatgaact tacatggcta tcttgctaaa
 120
 aacaaaattg gctatgagtc ggaagaagct aaagattttg ctaatatatt ctttatgatg
 180
 atgaattact attcacttga aagatcaatg caaatagcaa aagaaagaca ggaaacgttt
 240
 aaagactttg ataagtcaga ttatgcaaat ggaaaatatt tcgaatttta tacttcgcaa
 300
 tcatttgaac cgaaatacga aaaagtacgt aaattatttg atggttttaga aatcccaacg
 360
 cctgaagatt ggaaagcatt gcaaaaagaa gttgaaactc acgggtttatt ccatgcttat
 420
 cgttttagcga ttgca
 435

<210> 1862
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 1862
 Ala Leu Thr Val Val Ser Asp Glu Ala Asp Ile Gln Asn Ala Pro Gly

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      1             5             10             15
Val Arg Lys Ala Asn Ser Glu Leu His Ser Val Gly Leu Gly Val Met
      20             25             30
Asn Leu His Gly Tyr Leu Ala Lys Asn Lys Ile Gly Tyr Glu Ser Glu
      35             40             45
Glu Ala Lys Asp Phe Ala Asn Ile Phe Phe Met Met Met Asn Tyr Tyr
      50             55             60
Ser Leu Glu Arg Ser Met Gln Ile Ala Lys Glu Arg Gln Glu Thr Phe
      65             70             75             80
Lys Asp Phe Asp Lys Ser Asp Tyr Ala Asn Gly Lys Tyr Phe Glu Phe
      85             90             95
Tyr Thr Ser Gln Ser Phe Glu Pro Lys Tyr Glu Lys Val Arg Lys Leu
      100            105            110
Phe Asp Gly Leu Glu Ile Pro Thr Pro Glu Asp Trp Lys Ala Leu Gln
      115            120            125
Lys Glu Val Glu Thr His Gly Leu Phe His Ala Tyr Arg Leu Ala Ile
      130            135            140
Ala
145

```

<210> 1863

<211> 792

<212> DNA

<213> Homo sapiens

<400> 1863

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nggatacctca cgcccgcacat catacgtggg atatacgttga gcaaatacgt catgacgggg
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tctccgtcgt gctcactacc cacaacatgg atgaggctca acggctggct gatcacgtct
120
ggatcgctcga tcgcggcagg gtcgcaactc atggaactgt gccagagctc accgctgagt
180
cgagtttgga agatgtgttc ctactcaca ctagtgaccg cgcagcaggg aggaattgac
240
atgacgacac tcgatctccg ccccgcacct caggccgcac cggctgctgc acgcgtgcgt
300
aaccagctc tcaccgaggt gcgtctggtg atgcgcaacg gtgagcagct gctactagct
360
ctcgtcattc ccatacggat catcgtcgcc gggcgcttcc tgggcggccg ggtcggactg
420
acgatggacg tcttagcacc ctacgtgctg gcgctcgcca tctggtcgac atgtttcact
480
tcccaagcga tcatgaccgg ttttgaacgc cgttacgggg tgcgcgaacg attgtccgca
540
accccgttag gtcggtcggg tctgctagct ggcaaggcga tggcttattc cgttatcagt
600
ctcgtcagg tgatactgct tgtcatcatc tctttagcgc tgggctggca cccacaggt
660
tccggcctgg cctggtctcc aacctgggtg agcgttgtgc tcgccatgat gacattcggg
720
ctcgcagcac tggcaatggc cggcgctggc aaagctgaag tcaactctcg actggccaac
780
ttggtataca tc
792

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<210> 1864
 <211> 264
 <212> PRT
 <213> Homo sapiens

<400> 1864
 Xaa Ile Leu Thr Pro Ala Ile Ile Arg Gly Ile Ser Leu Ser Lys Cys
 1 5 10 15
 Val Met Thr Gly Ser Pro Ser Cys Ser Leu Pro Thr Thr Trp Met Arg
 20 25 30
 Leu Asn Gly Trp Leu Ile Thr Ser Gly Ser Ser Ile Ala Ala Gly Ser
 35 40 45
 Gln Leu Met Glu Leu Cys Gln Ser Ser Pro Leu Ser Arg Val Trp Lys
 50 55 60
 Met Cys Ser Ser Leu Thr Leu Val Thr Ala Gln Gln Gly Gly Ile Asp
 65 70 75 80
 Met Thr Thr Leu Asp Leu Arg Pro Ala Pro Gln Ala Ala Pro Ala Ala
 85 90 95
 Ala Arg Val Arg Asn His Ala Leu Thr Glu Val Arg Leu Val Met Arg
 100 105 110
 Asn Gly Glu Gln Leu Leu Leu Ala Leu Val Ile Pro Ile Gly Ile Ile
 115 120 125
 Val Ala Gly Arg Phe Leu Gly Gly Arg Val Gly Leu Thr Met Asp Val
 130 135 140
 Leu Ala Pro Ser Val Leu Ala Leu Ala Ile Trp Ser Thr Cys Phe Thr
 145 150 155 160
 Ser Gln Ala Ile Met Thr Gly Phe Glu Arg Arg Tyr Gly Val Leu Glu
 165 170 175
 Arg Leu Ser Ala Thr Pro Leu Gly Arg Ser Gly Leu Leu Ala Gly Lys
 180 185 190
 Ala Met Ala Tyr Ser Val Ile Ser Leu Ala Gln Val Ile Leu Leu Val
 195 200 205
 Ile Ile Ser Leu Ala Leu Gly Trp His Pro His Gly Ser Gly Leu Ala
 210 215 220
 Trp Leu Pro Thr Leu Val Ser Val Val Leu Ala Met Met Thr Phe Gly
 225 230 235 240
 Leu Ala Ala Leu Ala Met Ala Gly Ala Gly Lys Ala Glu Val Thr Leu
 245 250 255
 Gly Leu Ala Asn Leu Val Tyr Ile
 260

<210> 1865
 <211> 717
 <212> DNA
 <213> Homo sapiens

<400> 1865
 ngccggctga tcaaacaact cacagacatg ggcttcccga gagagccagc tgaggaggcc
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 ttgaagagta acaatatgaa tcttgatcag gccatgagcg ctctgctgga aaagaagggtg
 120
 gacgtggaca agcgtgggct gggagtgacc gaccataatg gaatggccgc caagcccctc
 180

ggctgccgcc cgccaatctc caaagagtct tccgtggacc gccccaccct tcttgacaag
 240
 gatggcggcc tcgtggaaga gcccacgcct tcaccgttct tgccttcccc aagcctgaag
 300
 ctcccccttt cacacagtgc actccccagt caggccctgg gtgggggtgc ctccgggctg
 360
 ggcattgcaaa acttgaattc ttctagacag ataccgagtg gcaatctggg tatgtttggc
 420
 aatagtggag cagcacaagc caggaccatg cagcagccgc cacagccacc agtgcagcct
 480
 cttaactctt cccagcccag tctccgtgct caagtgcctc agtttctatc ccctcaggtt
 540
 caagcacagc ttttgcagtt tgcagcaaaa aacattgggtc tcaaccctgc actattaacc
 600
 tcgccaatta atcctcaaca tatgacgatg ttgaaccagc tctatcagct gcagctggca
 660
 taccaacgtt taaaaatcca gcagcagatg ttacaggccc agcgtaatgt gtccgga
 717

<210> 1866

<211> 239

<212> PRT

<213> Homo sapiens

<400> 1866

Xaa	Arg	Leu	Ile	Lys	Gln	Leu	Thr	Asp	Met	Gly	Phe	Pro	Arg	Glu	Pro
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Ala	Glu	Glu	Ala	Leu	Lys	Ser	Asn	Asn	Met	Asn	Leu	Asp	Gln	Ala	Met
			20					25					30		
Ser	Ala	Leu	Leu	Glu	Lys	Lys	Val	Asp	Val	Asp	Lys	Arg	Gly	Leu	Gly
		35					40					45			
Val	Thr	Asp	His	Asn	Gly	Met	Ala	Ala	Lys	Pro	Leu	Gly	Cys	Arg	Pro
	50				55						60				
Pro	Ile	Ser	Lys	Glu	Ser	Ser	Val	Asp	Arg	Pro	Thr	Leu	Leu	Asp	Lys
65				70					75					80	
Asp	Gly	Gly	Leu	Val	Glu	Glu	Pro	Thr	Pro	Ser	Pro	Phe	Leu	Pro	Ser
			85					90					95		
Pro	Ser	Leu	Lys	Leu	Pro	Leu	Ser	His	Ser	Ala	Leu	Pro	Ser	Gln	Ala
			100					105					110		
Leu	Gly	Gly	Val	Ala	Ser	Gly	Leu	Gly	Met	Gln	Asn	Leu	Asn	Ser	Ser
		115					120					125			
Arg	Gln	Ile	Pro	Ser	Gly	Asn	Leu	Gly	Met	Phe	Gly	Asn	Ser	Gly	Ala
	130					135					140				
Ala	Gln	Ala	Arg	Thr	Met	Gln	Gln	Pro	Pro	Gln	Pro	Pro	Val	Gln	Pro
145					150					155				160	
Leu	Asn	Ser	Ser	Gln	Pro	Ser	Leu	Arg	Ala	Gln	Val	Pro	Gln	Phe	Leu
			165					170					175		
Ser	Pro	Gln	Val	Gln	Ala	Gln	Leu	Leu	Gln	Phe	Ala	Ala	Lys	Asn	Ile
			180				185						190		
Gly	Leu	Asn	Pro	Ala	Leu	Leu	Thr	Ser	Pro	Ile	Asn	Pro	Gln	His	Met
		195					200					205			
Thr	Met	Leu	Asn	Gln	Leu	Tyr	Gln	Leu	Gln	Leu	Ala	Tyr	Gln	Arg	Leu
	210					215					220				
Gln	Ile	Gln	Gln	Gln	Met	Leu	Gln	Ala	Gln	Arg	Asn	Val	Ser	Gly	

225

230

235

<210> 1867

<211> 518

<212> DNA

<213> Homo sapiens

<400> 1867

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 tccatgcatg ggacggcact tgggtccgcg atcaggtagc caggcatgga aggaacatgg
 120
 gaggaaggga actgtctggt gcgccagtgt tgttcaagga ggatgtgaca agacaggcca
 180
 tctggttggc tggccctgtt acccaacaac gtggtggcca aggccttgtg cccggagagg
 240
 ttcttggggg ccagcagggg gctacatagg acatgggtgg ggaccccagc tccgagccca
 300
 cctctctcgc ctccaccct tccaccnng cagcccccgc ctctcccga gaactctccc
 360
 caagccagac cgctggacc ggctgcttaa gtcaggcttt gggacatacc ctgggaggaa
 420
 gcgaggtgct ttgcaccccc aagtgatcat gttcccgtgc ccagcctgcc aaggtgatgt
 480
 ggagcttggg gagcggggtc tggcagggt tttccgga
 518

<210> 1868

<211> 73

<212> PRT

<213> Homo sapiens

<400> 1868

Gln Asp Arg Pro Ser Gly Trp Leu Ala Leu Leu Pro Asn Asn Val Val
 1 5 10 15
 Ala Lys Ala Leu Cys Pro Glu Arg Phe Leu Gly Ala Ser Arg Gly Leu
 20 25 30
 His Arg Thr Trp Val Gly Thr Pro Ala Pro Ser Pro Pro Leu Leu Pro
 35 40 45
 Pro Pro Leu Pro Pro Xaa Gln Pro Pro Pro Leu Pro Gln Asn Ser Pro
 50 55 60
 Gln Ala Arg Pro Pro Gly Pro Ala Ala
 65 70

<210> 1869

<211> 436

<212> DNA

<213> Homo sapiens

<400> 1869

acgcgtcacc ttcctgctgg agctactggg agccctcgga cacctgcgtg cattgcccga
 60
 ccgtgacatg ccgagcaccg aaaccacct gtggattcgc gagctgagcc gcatcgaccg
 120

cgacgtgtcg actgccaccc actttcgttg gagcgacgac ggcaccgtgc taggtcagac
 180
 gaccgacgat ggcaccgagc ctgaggttgt tgccctgccca gcggtctact gccgtcgttg
 240
 cggccgcagc ggatggggag tccagctcgc cagcaccggc aataacctca gcgagaacaa
 300
 cgacagcatc cgacggaccc acgcggcaca cgacggtcgc ttccgagcct tgctttcggc
 360
 ccctcgagag ggagccagcg cggctcgacac cggcgaggcg acactgtcct tacgtgtggt
 420
 cgacaccgtc aacagg
 436

<210> 1870

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1870

Met	Pro	Ser	Thr	Glu	Thr	His	Leu	Trp	Ile	Arg	Glu	Leu	Ser	Arg	Ile
1				5					10					15	
Asp	Arg	Asp	Val	Ser	Thr	Ala	Thr	His	Phe	Arg	Trp	Ser	Asp	Asp	Gly
			20					25					30		
Thr	Val	Leu	Gly	Gln	Thr	Thr	Asp	Asp	Gly	Thr	Glu	Pro	Glu	Val	Val
		35					40					45			
Ala	Leu	Pro	Ala	Val	Tyr	Cys	Arg	Arg	Cys	Gly	Arg	Ser	Gly	Trp	Gly
	50					55					60				
Val	Gln	Leu	Ala	Ser	Thr	Gly	Asn	Asn	Leu	Ser	Glu	Asn	Asn	Asp	Ser
	65				70					75				80	
Ile	Arg	Arg	Thr	His	Ala	Ala	His	Asp	Gly	Arg	Phe	Arg	Ala	Leu	Leu
				85					90					95	
Ser	Ala	Pro	Arg	Glu	Gly	Ala	Ser	Ala	Val	Asp	Thr	Gly	Glu	Ala	Thr
			100					105					110		
Leu	Ser	Leu	Arg	Trp	Phe	Asp	Thr	Val	Asn	Arg					
		115					120								

<210> 1871

<211> 474

<212> DNA

<213> Homo sapiens

<400> 1871

nntgcagcgc cccgaggtcg atgtctccaa cgtctttgcc agccttgaca tggctagcga
 60
 gcccgacctc gtccgtaccc tgctgaggca agcccaacaa tgaccgggga acagctcgcg
 120
 cattggatcg aggagtcgac gtcgacggtg tttttcggcg gcgccggaat gtccaccgaa
 180
 tcaggtattc cggactttcg ctccggtggc gggctttaca ccactcagca tgacctgccc
 240
 ttccccgcgg agtacatgct cagtcacagc tgtttggttg agcatcccg cggagttcttc
 300
 gacttctacc gcacctacct catccatcct caggccaggc ccaatgctgg tcacgtgcg
 360

ttggttgccct tggagcaggc tggggaaactt tcgacgatca ttacccagaa tattgacggc
420
ctgcaccaag aagctgggtc tcgtcaggtc attgagttgc atgggtcggt gcac
474

<210> 1872
<211> 125
<212> PRT
<213> Homo sapiens

<400> 1872
Met Thr Gly Glu Gln Leu Ala His Trp Ile Glu Glu Ser Thr Ser Thr
1 5 10 15
Val Phe Phe Gly Ala Gly Met Ser Thr Glu Ser Gly Ile Pro Asp
20 25 30
Phe Arg Ser Ala Gly Gly Leu Tyr Thr Thr Gln His Asp Leu Pro Phe
35 40 45
Pro Ala Glu Tyr Met Leu Ser His Ser Cys Leu Val Glu His Pro Ala
50 55 60
Glu Phe Phe Asp Phe Tyr Arg Thr Tyr Leu Ile His Pro Gln Ala Arg
65 70 75 80
Pro Asn Ala Gly His Arg Ala Leu Val Ala Leu Glu Gln Ala Gly Glu
85 90 95
Leu Ser Thr Ile Ile Thr Gln Asn Ile Asp Gly Leu His Gln Glu Ala
100 105 110
Gly Ser Arg Gln Val Ile Glu Leu His Gly Ser Val His
115 120 125

<210> 1873
<211> 338
<212> DNA
<213> Homo sapiens

<400> 1873
nacgcgtaga aatgaagccc cagctgggtca gagaccggaa atccggtagt gcacgggacg
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ggttccctcg gggatctcgg aggggagacc cccaccggg aggaactggag gcagcgcctc
120
tcccgcctcg gcgcgcgcag cctatttccc tctttccaag gggccaatcc ccaccgcggc
180
ccgcaggggg cgcgctcaag gcaaggtccg cggcgagaac ggtgccctagt gggagcgaag
240
ggcgaggcca gcccttggtc cttggccggc agttcgggtc ccgcctccaa attttagtat
300
gcatatgagt caccaggaaa gttttttgaa acaaattt
338

<210> 1874
<211> 93
<212> PRT
<213> Homo sapiens

<400> 1874
Ser Pro Ser Trp Ser Glu Thr Gly Asn Pro Val Val His Gly Thr Gly

```

      1             5             10             15
Ser Leu Gly Asp Leu Gly Gly Glu Thr Pro Thr Arg Glu Asp Trp Arg
      20             25             30
Gln Arg Leu Ser Arg Pro Gly Ala Arg Ser Leu Phe Pro Ser Phe Gln
      35             40             45
Gly Ala Asn Pro His Arg Gly Pro Gln Gly Ala Arg Ser Arg Gln Gly
      50             55             60
Pro Arg Arg Glu Arg Cys Pro Val Gly Ala Lys Gly Glu Ala Ser Pro
      65             70             75             80
Trp Ser Leu Ala Gly Ser Ser Gly Pro Ala Ser Lys Phe
      85             90

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<210> 1875.

<211> 366

<212> DNA

<213> Homo sapiens

<400> 1875

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aagcttggcg tacaagtggg tcgtcggttc tcaggtgggtg gagccgtgta tcacgatatg
60
ggcaatatct gcttctgctt cttacagaa gatgatggcg atagcttccg tgattttgga
120
aaattcacag aaccgtgat tgaagcactc cataaaatgg gagcaacagg ggcagagtta
180
caaggacgta acgaccttct catcgacgga aagaaattct ctggaaatgc gatgtactca
240
aacaatggcc gtttaacagc gcacggaaca ttaatgttgg atttagatgt gagcattttg
300
ccacaaattt tacgtccaaa acaagagaaa atcgagtcaa aaggaatcaa gtcggttcgt
360
tcacgc
366

```

<210> 1876

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1876

```

Lys Leu Gly Val Gln Val Val Arg Arg Phe Ser Gly Gly Gly Ala Val
      1             5             10             15
Tyr His Asp Met Gly Asn Ile Cys Phe Cys Phe Ile Thr Glu Asp Asp
      20             25             30
Gly Asp Ser Phe Arg Asp Phe Gly Lys Phe Thr Glu Pro Val Ile Glu
      35             40             45
Ala Leu His Lys Met Gly Ala Thr Gly Ala Glu Leu Gln Gly Arg Asn
      50             55             60
Asp Leu Leu Ile Asp Gly Lys Lys Phe Ser Gly Asn Ala Met Tyr Ser
      65             70             75             80
Asn Asn Gly Arg Leu Thr Ala His Gly Thr Leu Met Leu Asp Leu Asp
      85             90             95
Val Ser Ile Leu Pro Gln Ile Leu Arg Pro Lys Gln Glu Lys Ile Glu
      100            105            110
Ser Lys Gly Ile Lys Ser Val Arg Ser Arg

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115

120

<210> 1877
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 1877
 acgcgtgagt ggtcgcaaat atgacgggca agaaacgctt agaaagaaac taccatttaa
 60
 cgagggttatg caaattgcag aaatctctct atcggattgt ggctatatta tttcatcttt
 120
 ccaagctgct ggaccaaggg ctgtagggtt gcaacgacct attatatctg aacatttttt
 180
 tcaatttgac ccatttgata aacgacattg ggttgtctca catcatttac cacacgctgc
 240
 gacagctgct ttcacttccg gatttgaaga ttgcgctgga ttagtttcag atactgccg
 300
 atcgaacact cttgatggaa aggactatgt tgaaagctgc tgcaatgcta ttccacg
 357

<210> 1878
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 1878
 Met Gln Ile Ala Glu Ile Ser Leu Ser Asp Cys Gly Tyr Ile Ile Ser
 1 5 10 15
 Ser Phe Gln Ala Ala Gly Pro Arg Ala Val Gly Leu Gln Arg Pro Ile
 20 25 30
 Ile Ser Glu His Phe Phe Gln Phe Asp Pro Phe Asp Lys Arg His Trp
 35 40 45
 Val Val Ser His His Leu Pro His Ala Ala Thr Ala Ala Phe Thr Ser
 50 55 60
 Gly Phe Glu Asp Cys Ala Gly Leu Val Ser Asp Thr Ala Gly Ser Asn
 65 70 75 80
 Thr Leu Asp Gly Lys Asp Tyr Val Glu Ser Cys Cys Asn Ala Ile Pro
 85 90 95

<210> 1879
 <211> 1062
 <212> DNA
 <213> Homo sapiens

<400> 1879
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 tccttgggaa gtagctgaag agaaggcaca ggaagagtcg cctccactga tggctctcct
 120
 gtccctccca caggetctga cgcccgetct gcggcttcgg tgtttgaaca ggccacagtc
 180
 caggagcgct tacattcagg agctccgcgt agcacctgcc caaccaaact cagccctccg
 240

ttaagatcct ggttccatgc cgcagtagga cagcaggccc aagtctgcac atcccagtga
 300
 tgcaccatgc caatagtga taagttgaag gaggcctga aaccggccg caaggactcg
 360
 gctgatgatg gagaactggg gaagcttctt gcctcctctg ccaagaaggt ctttttacag
 420
 aaaatcgagt tcgagccagc cagcaagagc ttctcctacc agctggaggc cttaaagagc
 480
 aaatatgtgt tgctcaaccc caaacagag ggagctagtc gccacaagag tggagatgac
 540
 ccaccggcca ggagacaggg cagtgaacac acgtatgaga gctgtggtga cggagtccca
 600
 gccccgcaga aagtgtttt cccacggag cgactgtctc tgaggtggga gcgggtcttc
 660
 cgcgtgggcg caggactcca caaccttggc aacacctgct ttctcaatgc caccatccag
 720
 tgcttgacct acacaccacc tctagccaac tacctgtctt ccaaggagca tgctcgcagc
 780
 tgccaccagg gaagcttctg catgctgtgt gtcatgcaga accacattgt ccaggccttc
 840
 gccaacagcg gcaacgcat caagcccgtc tccttcatcc gagacctgaa aaagatcgcc
 900
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 960
 gccatgcaga aagcctgcct gaatggctgt gccaaagtgg atcgtaaacc gcaggctact
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<210> 1880

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1880

Met Pro Ile Val Asp Lys Leu Lys Glu Ala Leu Lys Pro Gly Arg Lys
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 Asp Ser Ala Asp Asp Gly Glu Leu Gly Lys Leu Leu Ala Ser Ser Ala
 20 25 30
 Lys Lys Val Leu Leu Gln Lys Ile Glu Phe Glu Pro Ala Ser Lys Ser
 35 40 45
 Phe Ser Tyr Gln Leu Glu Ala Leu Lys Ser Lys Tyr Val Leu Leu Asn
 50 55 60
 Pro Lys Thr Glu Gly Ala Ser Arg His Lys Ser Gly Asp Asp Pro Pro
 65 70 75 80
 Ala Arg Arg Gln Gly Ser Glu His Thr Tyr Glu Ser Cys Gly Asp Gly
 85 90 95
 Val Pro Ala Pro Gln Lys Val Leu Phe Pro Thr Glu Arg Leu Ser Leu
 100 105 110
 Arg Trp Glu Arg Val Phe Arg Val Gly Ala Gly Leu His Asn Leu Gly
 115 120 125
 Asn Thr Cys Phe Leu Asn Ala Thr Ile Gln Cys Leu Thr Tyr Thr Pro
 130 135 140
 Pro Leu Ala Asn Tyr Leu Leu Ser Lys Glu His Ala Arg Ser Cys His

```

145          150          155          160
Gln Gly Ser Phe Cys Met Leu Cys Val Met Gln Asn His Ile Val Gln
          165          170          175
Ala Phe Ala Asn Ser Gly Asn Ala Ile Lys Pro Val Ser Phe Ile Arg
          180          185          190
Asp Leu Lys Lys Ile Ala Arg His Phe Arg Phe Gly Asn Gln Glu Asp
          195          200          205
Ala His Glu Phe Leu Arg Tyr Thr Ile Asp Ala Met Gln Lys Ala Cys
          210          215          220
Leu Asn Gly Cys Ala Lys Leu Asp Arg Gln Thr Gln Ala Thr Thr Leu
225          230          235          240
Val His Gln Ile Phe Gly Gly Tyr Leu Arg Ser Arg
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<210> 1881

<211> 358

<212> DNA

<213> Homo sapiens

<400> 1881

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120
tcaacacgaa gattaacgac gtctacaacc ctctcaacaa caatgtggac tggttaagca
180
cgagaattga tctgctacag caagatttgg acaccactcg caagaaggat ctaaaaccag
240
ccacatcgat cgatatctgc accatcacat cgatcgatag caagttcgta gccatggaag
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358

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<210> 1882

<211> 115

<212> PRT

<213> Homo sapiens

<400> 1882

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Met Asp Ala Gly Lys Ala Thr Ser Ile Asp Val Lys Pro Gln Thr Ser
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Gln Ile Pro Ala Glu Pro Gln Ser Leu Ala Glu Lys Lys Asp Glu Trp
          20          25          30
Glu Ile Ala Tyr Ile Asn Thr Lys Ile Asn Asp Val Tyr Asn Pro Leu
          35          40          45
Asn Asn Asn Val Asp Trp Leu Ser Thr Arg Ile Asp Leu Leu Gln Gln
          50          55          60
Asp Leu Asp Thr Thr Arg Lys Lys Asp Leu Lys Pro Ala Thr Ser Ile
65          70          75          80
Asp Ile Cys Thr Ile Thr Ser Ile Asp Ser Lys Phe Val Ala Met Glu
          85          90          95
Asp Arg Leu Gln Ser Tyr Lys Asp Met His Asp Arg Phe Thr Ser Pro
          100          105          110
Ile Arg Arg

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115

<210> 1883
 <211> 367
 <212> DNA
 <213> Homo sapiens

<400> 1883
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 120
 tgctgaaggc gatgagtctg tatttgtcaa ctccaattca aacagctcga tggcgcctcc
 180
 tgtcctggag aacaatgctg ttgatctcac tgatgggctg acagatttgg aatcctatat
 240
 gaggtttctt atggatggcg gngcaagtga ttcaattgat agccttctga accttgatgg
 300
 atcacaggat cttggtagca atatggacct ctggaccttc gatgacatgc ccatcgctgg
 360
 cgatttn
 367

<210> 1884
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1884
 Met Asn Leu His Ser Asp Gln Gly Ser Asn Ser Leu Gly Cys Ser Asp
 1 5 10 15
 Leu Gly Trp Glu Asn Asp Thr Lys Thr Pro Asp Ile Thr Ser Ile Ala
 20 25 30
 Pro Ile Pro Thr Ile Ala Glu Gly Asp Glu Ser Val Phe Val Asn Ser
 35 40 45
 Asn Ser Asn Ser Ser Met Val Pro Pro Val Leu Glu Asn Asn Ala Val
 50 55 60
 Asp Leu Thr Asp Gly Leu Thr Asp Leu Glu Ser Tyr Met Arg Phe Leu
 65 70 75 80
 Met Asp Gly Gly Ala Ser Asp Ser Ile Asp Ser Leu Leu Asn Leu Asp
 85 90 95
 Gly Ser Gln Asp Leu Gly Ser Asn Met Asp Leu Trp Thr Phe Asp Asp
 100 105 110
 Met Pro Ile Ala Gly Asp Xaa
 115

<210> 1885
 <211> 392
 <212> DNA
 <213> Homo sapiens

<400> 1885
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 120
 ctgcgtagta cagctgctgt tgccgccggg gccgcgaccg gtaccggggtt ccaaccactg
 180
 aactggtgga tcctcgtcat tcccgtctc gctgcgctca tcctgctggt gcgcaacgcc
 240
 actggtcggg ccgcggcagg actggggat ctcttcggca tcggtctggt taccaccacc
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 360
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 392

<210> 1886

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1886

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Pro	Arg	His	His	Val	Arg	Arg	Ser	Arg	His	Val	Gly	Asn	Pro	Val	Ile
		20					25					30			
Ser	Arg	Leu	Arg	Arg	Thr	Ser	Trp	Leu	Arg	Ser	Thr	Ala	Ala	Val	Ala
	35					40					45				
Ala	Gly	Ala	Ala	Thr	Gly	Thr	Gly	Phe	Gln	Pro	Leu	Asn	Trp	Trp	Ile
50					55				60						
Leu	Val	Ile	Pro	Gly	Leu	Ala	Ala	Leu	Ile	Leu	Leu	Val	Arg	Asn	Ala
65				70				75					80		
Thr	Gly	Arg	Ala	Ala	Ala	Gly	Leu	Gly	Tyr	Leu	Phe	Gly	Ile	Gly	Leu
			85				90					95			
Phe	Thr	Thr	Thr	Ile	Ser	Trp	Val	Gly	Val	Ile	Gly	Pro	Pro	Val	Ala
			100				105					110			
Ile	Leu	Leu	Ile	Ala	Val	Met	Ala	Leu	Trp	Cys	Leu	Leu	Ala	Gly	Trp
	115					120					125				
Thr	Ile														
	130														

<210> 1887

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1887

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 120
 gctgccaaata tcaagagtca ccataatggt ggtgggctcc ctgacgacct ccagttcagt
 180
 ctcgttgagc cattgcgcac cctctttaag gacgaggtgc gagccgtcgg actcgaactt
 240
 ggtctgcccc aggacatcgt ctggcgctcag cccttcccgg gcccggggct ggctatccgc
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attattggcg aagtcaccgc ggagcgtctg gaggtgctac gcactgccga tgccatcacg
 360
 cgt
 363

<210> 1888
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1888
 Arg Glu Phe Ile Arg Thr Phe Glu Asp Val Ala Lys Arg Leu Asn Gly
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 Asp Gln Pro Ile Asp Phe Leu Val Gln Gly Thr Leu Tyr Pro Asp Val
 20 25 30
 Val Glu Ser Gly Gly Gly Glu Gly Ala Ala Asn Ile Lys Ser His His
 35 40 45
 Asn Val Gly Gly Leu Pro Asp Asp Leu Gln Phe Ser Leu Val Glu Pro
 50 55 60
 Leu Arg Thr Leu Phe Lys Asp Glu Val Arg Ala Val Gly Leu Glu Leu
 65 70 75 80
 Gly Leu Pro Glu Asp Ile Val Trp Arg Gln Pro Phe Pro Gly Pro Gly
 85 90 95
 Leu Ala Ile Arg Ile Ile Gly Glu Val Thr Ala Glu Arg Leu Glu Val
 100 105 110
 Leu Arg Thr Ala Asp Ala Ile Thr Arg
 115 120

<210> 1889
 <211> 530
 <212> DNA
 <213> Homo sapiens

<400> 1889
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 ggtgggggtga tggccatgca ctacgggtcg ctgcaaatac cggaacgggtt ttcgaccctc
 120
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 180
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 240
 atcgccgaaa cggtagggtt cgtgcgcgaa atgctaccgt cgaagcatcc gtacgcaaag
 300
 gtcgtcgtga ccccggcagg tcagatccag ccacagacgt ggctgctggg atcgtcgggc
 360
 cagtcagcag cgtgggctgg tgagcagggt atggactacg cctacgcca gttttcacc
 420
 gggcgccagg acaccgggat catggatcac taccgcgcgc acctgtccga cggcttcccc
 480
 ggcaggaccc tctcagcagt gtgtgtatcg gctgctccga cgcgtccgga
 530

<210> 1890

<211> 176
 <212> PRT
 <213> Homo sapiens

<400> 1890
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 Arg Leu Gly Ser Gly Gly Val Met Ala Met His Tyr Gly Ser Leu Gln
 20 25 30
 Ile Ala Glu Arg Phe Ser Thr Leu Thr Ala Leu Phe Gly Asp Arg Ile
 35 40 45
 Asp Met Gly Leu Gly Arg Ala Pro Gly Gly Asp Met Leu Ser Ala His
 50 55 60
 Ala Leu Asn Gln Gly Gln Val Ile Arg Pro Glu Ala Ile Asn Ser Leu
 65 70 75 80
 Ile Ala Glu Thr Val Gly Phe Val Arg Glu Met Leu Pro Ser Lys His
 85 90 95
 Pro Tyr Ala Lys Val Val Val Thr Pro Ala Gly Gln Ile Gln Pro Gln
 100 105 110
 Thr Trp Leu Leu Gly Ser Ser Gly Gln Ser Ala Ala Trp Ala Gly Glu
 115 120 125
 Gln Gly Met Asp Tyr Ala Tyr Ala Gln Phe Phe Thr Gly Arg Gln Asp
 130 135 140
 Thr Gly Ile Met Asp His Tyr Arg Ala His Leu Ser Asp Gly Phe Pro
 145 150 155 160
 Gly Arg Thr Leu Ser Ala Val Cys Val Ser Ala Ala Pro Thr Arg Pro
 165 170 175

<210> 1891
 <211> 423
 <212> DNA
 <213> Homo sapiens

<400> 1891
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 120
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 180
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 240
 ggattttgta ccggtatggg gaggcactac ggttgagat ttagcttttc agcgtggata
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 423

<210> 1892
 <211> 121
 <212> PRT

<213> Homo sapiens

<400> 1892

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Met Trp Ala Pro Leu Pro Gln Ser Ser Ile Cys Thr Arg Leu Pro Thr
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Leu Gln Met Ala Pro Ala Cys Arg Glu Ile Gln Arg Gln Phe Thr Glu
 20           25           30
Ala Ala Gln Leu Pro Ile Asn Phe Leu Ala Trp Leu Asn Gly Val Met
 35           40           45
Gly Arg Gly Gln Gly Leu Asp His Thr His Val Ser Pro Pro Ala Ser
 50           55           60
Ser Thr Leu Gly Phe Cys Thr Gly Met Gly Arg His Tyr Gly Cys Arg
 65           70           75           80
Phe Ser Phe Ser Ala Trp Ile Gln Ala Pro Lys Cys Pro Arg Pro Gln
 85           90           95
Gln Lys Pro Cys Cys Arg Phe Gln Pro Ala Asp Leu Val Ser Cys
100           105           110
Cys Arg Ser Asp Gln Gln Asn Cys Tyr
115           120

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<210> 1893

<211> 886

<212> DNA

<213> Homo sapiens

<400> 1893

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120
gtggaataca tgggtggcat ggacgacctc gtcgggatcg tcgccgagtt taagcctggt
180
ccggggcatc gccttggcgt gttggttgac cacctcggtg ccgacaccaa agagtcacgg
240
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300
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420
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660
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720
gcgagctggg tgccgctgtg accaagtatg ccggcggtat tgcgtgggg gaggaatcag
780
ccttcgccga cccaaccatc cttgatgccg tttccgatgc tgacctggcc tgggtcatcg
840

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acccattga tggcactaag aacttcgtgc acgggtctgt tgatca
886

<210> 1894

<211> 191

<212> PRT

<213> Homo sapiens

<400> 1894

Thr	Gly	Gly	Ala	Glu	Pro	Ala	Arg	Val	Ala	Leu	Pro	Ser	Arg	Ile	Tyr
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Val	Glu	Gly	Arg	His	Asp	Ala	Glu	Leu	Val	Glu	Lys	Ile	Trp	Gly	Asp
			20					25					30		
Asp	Leu	Arg	His	Val	Gly	Val	Val	Val	Glu	Tyr	Met	Gly	Gly	Met	Asp
	35					40						45			
Asp	Leu	Val	Gly	Ile	Val	Ala	Glu	Phe	Lys	Pro	Gly	Pro	Gly	His	Arg
	50					55					60				
Leu	Gly	Val	Leu	Val	Asp	His	Leu	Val	Ala	Asp	Thr	Lys	Glu	Ser	Arg
65					70					75				80	
Val	Ala	Asp	Glu	Val	Arg	Arg	Gly	Gly	Tyr	Ser	Glu	Tyr	Val	Met	Ile
			85						90					95	
Thr	Gly	His	Arg	Phe	Ile	Asp	Ile	Trp	Gln	Ala	Ile	Lys	Pro	Gln	Arg
			100					105					110		
Ile	Gly	Arg	Gln	Glu	Trp	Pro	Glu	Val	Pro	Met	Asp	Glu	Asp	Phe	Lys
	115					120					125				
Leu	Gly	Thr	Leu	Lys	Arg	Leu	Gly	Leu	Pro	His	Ser	Thr	Gln	Ala	Asp
	130					135					140				
Val	Gly	Lys	Ala	Trp	Gln	Ala	Met	Leu	Ala	Arg	Val	Arg	Asp	Trp	His
145					150					155				160	
Asp	Leu	Asp	Pro	Arg	Phe	Asn	Thr	Glu	Met	Glu	Lys	Leu	Ile	Asp	Phe
				165				170						175	
Val	Thr	Arg	Asp	His	Val	Asp	Glu	Leu	Asp	Asn	Gly	Glu	Met	Ala	
			180					185					190		

<210> 1895

<211> 2555

<212> DNA

<213> Homo sapiens

<400> 1895

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180
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420

gatagccgtc agagattaga ctatgagaga gagattcagc ctactgctat tttgtcctta
480
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 2555

<210> 1896

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1896

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Thr	Leu	Pro	Ser	Cys	Leu	Ala	Cys	Asn	Arg	Gln	Cys	Leu	Cys	Ser	Ala
			20					25						30	
Glu	Ser	Met	Val	Glu	Tyr	Gly	Thr	Cys	Met	Cys	Leu	Val	Lys	Gly	Ile
		35					40					45			
Phe	Tyr	His	Cys	Ser	Asn	Asp	Asp	Glu	Gly	Asp	Ser	Tyr	Ser	Asp	Asn
	50					55				60					
Pro	Cys	Ser	Cys	Ser	Gln	Ser	His	Cys	Cys	Ser	Arg	Tyr	Leu	Cys	Met
65					70					75				80	
Gly	Ala	Met	Ser	Leu	Phe	Leu	Pro	Cys	Leu	Leu	Cys	Tyr	Pro	Pro	Ala
				85					90					95	
Lys	Gly	Cys	Leu	Lys	Leu	Cys	Arg	Arg	Cys	Tyr	Asp	Trp	Ile	His	Arg
			100					105					110		
Pro	Gly	Cys	Arg	Cys	Lys	Asn	Ser	Asn	Thr	Val	Tyr	Cys	Lys	Leu	Glu
		115				120						125			
Ser	Cys	Pro	Ser	Arg	Gly	Gln	Gly	Lys	Pro	Ser					
		130				135									

<210> 1897

<211> 938

<212> DNA

<213> Homo sapiens

<400> 1897

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 480
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 540
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 660
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 720
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 780
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 840
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 900
 agtgtagccc caaggcccca aactgtagcc ctagatct
 938

<210> 1898

<211> 312

<212> PRT

<213> Homo sapiens

<400> 1898

Arg	His	Gly	Cys	Tyr	Val	Cys	Gly	Lys	Ser	Phe	Ala	Trp	Arg	Ser	Thr
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Leu	Val	Glu	His	Val	Tyr	Ser	His	Thr	Gly	Glu	Lys	Pro	Phe	His	Cys
			20					25					30		
Thr	Asp	Cys	Gly	Lys	Gly	Phe	Gly	His	Ala	Ser	Ser	Leu	Ser	Lys	His
		35					40					45			
Arg	Ala	Ile	His	Arg	Gly	Glu	Arg	Pro	His	Arg	Cys	Leu	Glu	Cys	Gly
		50				55					60				
Arg	Ala	Phe	Thr	Gln	Arg	Ser	Ala	Leu	Thr	Ser	His	Leu	Arg	Val	His
65				70				75						80	
Thr	Gly	Glu	Lys	Pro	Tyr	Gly	Cys	Ala	Asp	Cys	Gly	Arg	Arg	Phe	Ser
			85					90						95	
Gln	Ser	Ser	Ala	Leu	Tyr	Gln	His	Arg	Arg	Val	His	Ser	Gly	Glu	Thr
			100					105					110		
Pro	Phe	Pro	Cys	Pro	Asp	Cys	Gly	Arg	Ala	Phe	Ala	Tyr	Pro	Ser	Asp
		115					120					125			
Leu	Arg	Arg	His	Val	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Pro	Cys
		130				135						140			
Pro	Asp	Cys	Gly	Arg	Arg	Phe	Ser	Ser	Ser	Ser	Leu	Leu	Val	Ser	His


```

145          150          155          160
Arg Arg Ala His Ser Gly Glu Cys Pro Tyr Val Cys Asp Gln Cys Gly
          165          170          175
Lys Arg Phe Ser Gln Arg Lys Asn Leu Ser Gln His Gln Val Ile His
          180          185          190
Thr Gly Glu Lys Pro Tyr His Cys Pro Asp Cys Gly Arg Cys Phe Arg
          195          200          205
Arg Ser Arg Ser Leu Ala Asn His Arg Thr Thr His Thr Gly Glu Lys
          210          215          220
Pro His Gln Cys Pro Ser Cys Gly Arg Arg Phe Ala Tyr Pro Ser Leu
225          230          235          240
Leu Ala Ser His Arg Arg Val His Ser Gly Glu Arg Pro Tyr Ala Cys
          245          250          255
Asp Leu Cys Ser Lys Arg Phe Ala Gln Trp Ser His Leu Ala Gln His
          260          265          270
Gln Leu Leu His Thr Gly Glu Lys Pro Phe Pro Cys Leu Glu Cys Gly
          275          280          285
Arg Ala Ser Ala Arg Gly Gly Leu Trp Leu Ser Thr Ser Val Ala Pro
          290          295          300
Arg Pro Gln Thr Val Ala Leu Asp
305          310

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<210> 1899

<211> 508

<212> DNA

<213> Homo sapiens

<400> 1899

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aaatttgcct ccctaattgg caaggtgcaa gccctggaac agcgcgacca gctgctggag
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120
gaggaaatat caggccggct gcgaggaggaa ctgggccaaa gggacaggaa ccgggggagcag
180
ctggaggcca ccctgctgca ggtgttgaaa aaggtggagg agtttcgaat caggtattga
240
gatgagatct ccaagcgac agacatggag ttcacctttg ttcagctgaa gaaggacctg
300
gatgcagagt gtcttcatcg gactgaactg gaaaccaagt taaaaagcct ggagagcttc
360
gtggagtga tgaaaaccat ctatgagcag gagctgaagg acctggcagc acaggtgaag
420
gatgtgtcgg tgaccgtcgg catggacagc cgctgccaca tcgacctgag cggcatcgtg
480
gaggaggtga aggccagta tgacgccg
508

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<210> 1900

<211> 79

<212> PRT

<213> Homo sapiens

<400> 1900

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Lys Phe Ala Ser Leu Ile Gly Lys Val Gln Ala Leu Glu Gln Arg Asp

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      1           5           10           15
Gln Leu Leu Glu Thr Arg Trp Ser Phe Leu Gln Gly Gln Asp Ser Ala
      20           25           30
Ile Phe Asp Leu Gly His Leu Tyr Glu Glu Ile Ser Gly Arg Leu Arg
      35           40           45
Arg Glu Leu Gly Gln Arg Asp Arg Asn Arg Gly Gln Leu Glu Ala Thr
      50           55           60
Leu Leu Gln Val Leu Lys Lys Val Glu Glu Phe Arg Ile Arg Tyr
      65           70           75

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<210> 1901

<211> 453

<212> DNA

<213> Homo sapiens

<400> 1901

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60
cgggtgttcgg cgatgcgaag gcaacccgcg cttccaagtt cgaccggttc cagccgcgcg
120
aggaattcga cgaggtcagc gccgccatgc agttccactg gggctccttc ttccacaacg
180
cgcacccggg cgagaagtgg ccggtctacg gtttccgcag cgacacggag cccggccgcg
240
cgaccgcgat cttcgcggcg aagtctccg tggagtacga cccaaggcg gcgcagcgcc
300
gcgcgtggga gggctttgac atgcgcgaat ggggcacgca caggcaggac ctggtggaaa
360
cgctcaccga ttccatcgcc gacgagggca acgcttagcg acgccagcgc caccgagttt
420
agagaaatga aagaaatttt aatagagggt gga
453

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<210> 1902

<211> 151

<212> PRT

<213> Homo sapiens

<400> 1902

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Thr Arg Gly Pro Arg Cys Ala Gly Ser Gly Ser Ala Pro Cys Thr Pro
  1           5           10           15
Arg Thr Trp Arg Arg Cys Ser Ala Met Arg Arg Gln Pro Ala Leu Pro
      20           25           30
Ser Ser Thr Arg Ser Ser Arg Ala Arg Asn Ser Thr Arg Ser Ala Pro
      35           40           45
Pro Cys Ser Ser Thr Gly Ala Pro Ser Ser Thr Thr Arg Ile Arg Ala
      50           55           60
Arg Ser Gly Arg Ser Thr Val Ser Ala Ala Thr Arg Ser Pro Ala Ala
      65           70           75           80
Arg Pro Arg Ser Ser Arg Arg Ser Pro Pro Trp Ser Thr Thr Pro Arg
      85           90           95
Arg Arg Ser Ala Ala Arg Gly Arg Ala Leu Thr Cys Ala Asn Gly Ala
      100          105          110
Cys Thr Gly Arg Thr Trp Trp Lys Arg Ser Pro Ile Pro Ser Pro Thr

```

115 120 125
 Arg Ala Thr Leu Ser Asp Ala Ser Ala Thr Glu Phe Arg Glu Met Lys
 130 135 140
 Glu Ile Leu Ile Glu Gly Gly
 145 150

<210> 1903
 <211> 531
 <212> DNA
 <213> Homo sapiens

<400> 1903
 ccggcgaggg agctgttccg ggacgccgcc ttccccgcgg cggactcctc gctcttctgc
 60
 gacttgtcta cgccgctggc ccagttccgc gaggacatca cgtggaggcg gccccagaga
 120
 atttgtgcca acccccgtt gtttccaaat gaccaacggg aagggcaggt gaagcagggg
 180
 ctgctggggg attgctgggt cctgtgtgcc tgcgccgcgc tgcagaagag caggcacctc
 240
 ctggaccagg tcattcctgc gggacagccg agctggggccg accaggagta ccggggctcc
 300
 ttcacctgtc gcttttggca gtttggacgg tgggtggagg gtccatgggt cccttcgagc
 360
 ccctgtgggc ggggcaggtg gcggatgccc tgggtggacct gaccggcggc ctggcagaaa
 420
 gatggaacct gaagggcgta gcaggaagcg gaggccagca ggacaggcca ggccgctggg
 480
 agcacaggac ttgtcggcag ctgctccacc tgaaggacca gtgtctgata a
 531

<210> 1904
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 1904
 Pro Ala Arg Glu Leu Phe Arg Asp Ala Ala Phe Pro Ala Ala Asp Ser
 1 5 10 15
 Ser Leu Phe Cys Asp Leu Ser Thr Pro Leu Ala Gln Phe Arg Glu Asp
 20 25 30
 Ile Thr Trp Arg Arg Pro Gln Arg Ile Cys Ala Asn Pro Arg Leu Phe
 35 40 45
 Pro Asn Asp Gln Arg Glu Gly Gln Val Lys Gln Gly Leu Leu Gly Asp
 50 55 60
 Cys Trp Phe Leu Cys Ala Cys Ala Ala Leu Gln Lys Ser Arg His Leu
 65 70 75 80
 Leu Asp Gln Val Ile Pro Ala Gly Gln Pro Ser Trp Ala Asp Gln Glu
 85 90 95
 Tyr Arg Gly Ser Phe Thr Cys Arg Phe Trp Gln Phe Gly Arg Trp Val
 100 105 110
 Glu Gly Pro Trp Val Pro Ser Ser Pro Cys Gly Arg Gly Arg Trp Arg
 115 120 125
 Met Pro Trp Trp Thr

130

<210> 1905

<211> 387

<212> DNA

<213> Homo sapiens

<400> 1905

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acgcgtgggc tgatcggcat gctctgggca ctgggggtgg tggcggaagt gctgatgttc
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120
ctcttgggcg ccgtgcgctg gttgctgctg ggcgcgttgg ccgatcacct ggcgggtgctg
180
ttgttcgccc aggtgctgca cgcggcgacc ttgcccagct ttcacgcctc tgccattcat
240
ttcgtgcaac gtagcttcgg cgcgcgcncg gcaaggccag ggcaggcggt atacgctgca
300
ctggccggta cgggcggggc ttggggcgcg ttgtacgcg gttatagctg gaacagcctg
360
gggccgacct ggactttcag catcggtt
387

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<210> 1906

<211> 129

<212> PRT

<213> Homo sapiens

<400> 1906

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Thr Arg Gly Leu Ile Gly Met Leu Trp Ala Leu Gly Val Val Ala Glu
 1           5           10           15
Val Leu Met Phe Leu Ala Met Ser Arg Ile Leu Ala Arg Phe Ser Val
           20           25           30
Arg Arg Val Leu Leu Ala Ser Phe Leu Leu Ala Ala Val Arg Trp Leu
           35           40           45
Leu Leu Gly Ala Leu Ala Asp His Leu Ala Val Leu Leu Phe Ala Gln
           50           55           60
Val Leu His Ala Ala Thr Phe Ala Ser Phe His Ala Ser Ala Ile His
           65           70           75           80
Phe Val Gln Arg Ser Phe Gly Ala Arg Xaa Ala Arg Pro Gly Gln Ala
           85           90           95
Leu Tyr Ala Ala Leu Ala Gly Thr Gly Gly Ala Leu Gly Ala Leu Tyr
           100          105          110
Ala Gly Tyr Ser Trp Asn Ser Leu Gly Pro Thr Trp Thr Phe Ser Ile
           115          120          125
Val

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<210> 1907

<211> 333

<212> DNA

<213> Homo sapiens

<400> 1907

acgcgttttcg accagcgcac ccgtgtcggc ggcattggcg aaatcgtcgg cttcgacaag
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aagctgcgcg ccgcgcgccg cgaaacgctc gagatgtcgc tcaacgacct gttccccggc
120
ggcggcgaca cgtcgaaggc caggttcttg acgggcctgc gcccgatgac gccggacggc
180
acgccgatcg tcggccgcac gccggtgtcg aacctgttcc tgaacaccgg ccacggcacg
240
ctcggctgga caatggtgtg cggtcggggc caactgctcg ccgacctgat ctcgggcaag
300
atgcccgcga tccaggccga cgacctgtct nnc
333

<210> 1908

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1908

Thr	Arg	Phe	Asp	Gln	Arg	Ile	Arg	Val	Gly	Gly	Met	Ala	Glu	Ile	Val
1				5					10					15	
Gly	Phe	Asp	Lys	Lys	Leu	Arg	Ala	Ala	Arg	Arg	Glu	Thr	Leu	Glu	Met
			20					25					30		
Cys	Val	Asn	Asp	Leu	Phe	Pro	Gly	Gly	Gly	Asp	Thr	Ser	Lys	Ala	Thr
		35					40					45			
Phe	Trp	Thr	Gly	Leu	Arg	Pro	Met	Thr	Pro	Asp	Gly	Thr	Pro	Ile	Val
	50					55				60					
Gly	Arg	Thr	Pro	Val	Ser	Asn	Leu	Phe	Leu	Asn	Thr	Gly	His	Gly	Thr
65					70					75				80	
Leu	Gly	Trp	Thr	Met	Val	Cys	Gly	Ser	Gly	Gln	Leu	Leu	Ala	Asp	Leu
			85					90					95		
Ile	Ser	Gly	Lys	Met	Pro	Ala	Ile	Gln	Ala	Asp	Asp	Leu	Ser	Xaa	
			100					105					110		

<210> 1909

<211> 2767

<212> DNA

<213> Homo sapiens

<400> 1909

ngactgccgg tcgttcggac gtcttgccctg tcgcgtggag gagaggcccg ggctctccag
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gaagggtggct gcggcgacaa aatgaagata ttctgtggga acgtcgacgg gccggatacg
120
actccggagg agctggcagc cctctttgcg ccctacggca cggatcatgag ctgcgccgtc
180
atgaaacagt tcgccttcgt gcacatgcgc gagaacgcgg gcgcgctcgc cgccatcgaa
240
gccctgcacg gccacgagct gcggccgggg cgcgcgctcg tgggtggaaat gtcgcgccca
300
aggcctctta atacttgga gattttcgtg ggcaatgtgt cggctgcatg cagagccag
360
gaactgcga gcctcttcga gcggccggga cgcgatcatg agtgtgacgt ggtgaaagac
420

tacgcgtttg ttcacatgga gaaggaagca gatgccaaag ccgcaatcgc gcagctcaac
480
ggcaaagaag tgaagggaag ggcacatcaac gtggaactct ccaccaaggg tcagaagaag
540
gggcctggcc tggctgtcca gtctggggac aagaccaaga aaccaggggc tggggatacg
600
gccttccctg gaactggtgg cttctctgcc accttcgact accagcaggc ttttggaac
660
agcactggtg gctttgatgg gcaagcccg tgcgccacac cacccttctt tggtcgcgac
720
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780
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840
tctgcctctt tgggtgttgg ctatcggact cagcccatga cagcccaggc agcctcttac
900
cgcgctcagc cctctgtctc ccttggggca ccatacaggg gccagctggc tagtcttagc
960
tcccagctctg ctgcagcttc ttcactcggc ccatatggtg gagcccagcc ctacgcctcg
1020
gccctttcct cctatggggg tcaggcagct gcagcttctt cgctcaactc ctatggggct
1080
cagggttctt cccttgctc ctatggtaac cagccatctt cttacggcgc ccaggctgcc
1140
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1200
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1260
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1320
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1380
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1440
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1500
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1560
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1620
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1680
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1740
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1800
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1860
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1920
taccgcggtt tatcagagtc gcagctttcg ttccgcccgt cgcgacaaa gtctctgctg
1980
gattaccgtc gcctgcccga tgccattcc gattacgcac gctattcggg ctctataat
2040

gattacctgc gggcggtca gatgcactct ggctaccagc gccgcatgta gggccatcct
 2100
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 2160
 tataactact ctggcccata cctttcctgg ttgtggtttt tcatgccctc taccatgtgg
 2220
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 2400
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 2460
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 2520
 gccaaagtgt gccagcagtc cagggtagcc tgactgtccc tctgtagact gttgagactg
 2580
 agttcctggt gggacagtca gttggtatgt atccaagtcc ctgctgacca ctaatgttct
 2640
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 2700
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 2760
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 2767

<210> 1910

<211> 669

<212> PRT

<213> Homo sapiens

<400> 1910

Met	Lys	Ile	Phe	Val	Gly	Asn	Val	Asp	Gly	Ala	Asp	Thr	Thr	Pro	Glu
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Glu	Leu	Ala	Ala	Leu	Phe	Ala	Pro	Tyr	Gly	Thr	Val	Met	Ser	Cys	Ala
		20						25					30		
Val	Met	Lys	Gln	Phe	Ala	Phe	Val	His	Met	Arg	Glu	Asn	Ala	Gly	Ala
		35					40					45			
Leu	Arg	Ala	Ile	Glu	Ala	Leu	His	Gly	His	Glu	Leu	Arg	Pro	Gly	Arg
	50					55					60				
Ala	Leu	Val	Val	Glu	Met	Ser	Arg	Pro	Arg	Pro	Leu	Asn	Thr	Trp	Lys
65				70					75					80	
Ile	Phe	Val	Gly	Asn	Val	Ser	Ala	Ala	Cys	Thr	Ser	Gln	Glu	Leu	Arg
			85						90				95		
Ser	Leu	Phe	Glu	Arg	Arg	Gly	Arg	Val	Ile	Glu	Cys	Asp	Val	Val	Lys
		100					105					110			
Asp	Tyr	Ala	Phe	Val	His	Met	Glu	Lys	Glu	Ala	Asp	Ala	Lys	Ala	Ala
	115					120					125				
Ile	Ala	Gln	Leu	Asn	Gly	Lys	Glu	Val	Lys	Gly	Lys	Arg	Ile	Asn	Val
	130				135						140				
Glu	Leu	Ser	Thr	Lys	Gly	Gln	Lys	Lys	Gly	Pro	Gly	Leu	Ala	Val	Gln
145				150					155					160	
Ser	Gly	Asp	Lys	Thr	Lys	Lys	Pro	Gly	Ala	Gly	Asp	Thr	Ala	Phe	Pro

1460

595 600 605
 Ala Glu Leu Ser Asp Tyr Arg Arg Leu Ser Glu Ser Gln Leu Ser Phe
 610 615 620
 Arg Arg Ser Pro Thr Lys Ser Ser Leu Asp Tyr Arg Arg Leu Pro Asp
 625 630 635 640
 Ala His Ser Asp Tyr Ala Arg Tyr Ser Gly Ser Tyr Asn Asp Tyr Leu
 645 650 655
 Arg Ala Ala Gln Met His Ser Gly Tyr Gln Arg Arg Met
 660 665

<210> 1911
 <211> 339
 <212> DNA
 <213> Homo sapiens

<400> 1911
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 120
 cgcattcgacg atgaaagctt cctccgccca gttgagccga cccaagccgc accgtgggcy
 180
 gcagcgcata gccagcaggc gtggtggaat cacctgaagt acctgcgcac cgccgcgcgt
 240
 gaagcactgg tgggtcccgt cgctattgag gtggagggga aattcgcagg gcaggtaacc
 300
 ctgggaaaca ttcagcatgg cagcattcgc gattgctgg
 339

<210> 1912
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1912
 Xaa Gly Trp Pro Glu Ser Thr Pro Ser Val Gln Leu Pro Ser Ser Ser
 1 5 10 15
 Val Phe Pro Ser Gly Ala Arg Met Arg Leu Arg Pro Leu Leu Arg Ser
 20 25 30
 Asp Gly His Glu Trp Arg Arg Gln Arg Ile Asp Asp Glu Ser Phe Leu
 35 40 45
 Arg Pro Val Glu Pro Thr Gln Ala Ala Pro Trp Ala Ala Ala His Ser
 50 55 60
 Gln Gln Ala Trp Trp Asn His Leu Lys Tyr Leu Arg Thr Ala Ala Arg
 65 70 75 80
 Glu Ala Leu Val Val Pro Leu Val Ile Glu Val Glu Gly Lys Phe Ala
 85 90 95
 Gly Gln Val Thr Leu Gly Asn Ile Gln His Gly Ser Ile Arg Asp Cys
 100 105 110
 Trp

<210> 1913
 <211> 767

<212> DNA

<213> Homo sapiens

<400> 1913

gtgcacaccg gttcacagcg atatttcagg caaattgaaa gcgtcagttc gataggctga
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 atgcgaaatg ggggatttgt caccctcagg gaccggaagg aaggagcag tccgatggca
 120
 gcgccagtac tcgatctcgt cctcccagcc ttgtccgaaa cctccgcaa tctcatcggc
 180
 cagaggttgc gccagggatg tcacacctcc atccccacat cgaatctacg gtgagcttcg
 240
 tcccagctgt cgggcagtac aaggcacctc ggatcaagct ttcctggcgt gaactgggtcc
 300
 tggtacccat caatgccacc cacctgcact ccaatcccc acaagttgtc caacacgccg
 360
 cagaattgcy tcgcagccac ccggaccttg ccatcaaggt ggcccgcgcc accggaccag
 420
 caccggctct cctcaacctc gtcgatacgc gattgcgtct ggcagctcat cgcgtccatg
 480
 cccaggagct ggactcactc gtattgtctt cccctgatgg cggcgattta cgtggctcgg
 540
 caatgctgtc caggctgacc cggctgtggt cccagcacca ccaccttcg gtccgcatcg
 600
 ccaccaatcg tgggtggggt actgcggtcg aggaggtcgt cgcccgctg cgacaggagg
 660
 ggcgcgctca tatcgcatg ggaagcctgt ggatttgca cgacgagaat ttccgcattc
 720
 atactcgcca ggctttgcat gccggtgccg aggttgctgc cgcaccg
 767

<210> 1914

<211> 190

<212> PRT

<213> Homo sapiens

<400> 1914

Met	Ser	His	Leu	His	Pro	His	Ile	Glu	Ser	Thr	Val	Ser	Phe	Val	Pro
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Ala	Val	Gly	Gln	Tyr	Lys	Ala	Pro	Arg	Ile	Lys	Leu	Ser	Trp	Arg	Glu
			20					25					30		
Leu	Val	Leu	Val	Pro	Ile	Asn	Ala	Thr	His	Leu	His	Ser	Asn	Pro	Pro
			35				40					45			
Gln	Val	Val	Gln	His	Ala	Ala	Glu	Leu	Arg	Arg	Ser	His	Pro	Asp	Leu
		50			55						60				
Ala	Ile	Lys	Val	Ala	Arg	Pro	Thr	Gly	Pro	Ala	Pro	Val	Leu	Leu	Asn
65					70					75				80	
Leu	Val	Asp	Thr	Arg	Leu	Arg	Leu	Ala	Ala	His	Arg	Val	His	Ala	Gln
				85					90					95	
Glu	Leu	Asp	Ser	Leu	Val	Leu	Ser	Ser	Pro	Asp	Gly	Gly	Asp	Leu	Arg
			100					105					110		
Gly	Ser	Ala	Met	Leu	Ser	Arg	Leu	Thr	Arg	Leu	Trp	Ser	Gln	His	His
			115				120						125		
His	Leu	Pro	Val	Arg	Ile	Ala	Thr	Asn	Arg	Gly	Gly	Ala	Thr	Ala	Val

130	135	140
Glu Glu Val Val Ala Arg Leu Arg Gln Glu Gly Arg Arg His Ile Ala		
145	150	155
Val Gly Ser Leu Trp Ile Cys Asp Asp Glu Asn Phe Arg Ile His Thr		160
	165	170
Arg Gln Ala Leu His Ala Gly Ala Glu Val Val Ala Ala Pro		175
180	185	190

<210> 1915

<211> 571

<212> DNA

<213> Homo sapiens

<400> 1915

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aggtgtgagc gcacgatggg cagtcacgcc gcacacacgc tctgctcatg tccctcccca
120
ggacctctg accgggcaca agggcagctg tgaggacaag gccacagcca caaaccaacc
180
tggcacacac ggctcagggc gaggcactgc cccatggggc tgcattgatcc acgctcacag
240
gtgtcattgt ctatgctcag gggggcttgg caccatggga aaccacacca gaacacatgg
300
agaagccaca gcacaacctc agcggccgcc atgcaggacc ctgggtctca cccattgcac
360
ccaccgtgcg ggacctctgc gctcaccgc gaacatccac agtgtgggac tgctgcgtct
420
caccactgc acctgccgtg caggatccct gagtctcacc cgccgcaccc gccgtgctgg
480
atccctgagt ctcaccgcgc gcaccgcgcg tacctgccgc atccgccatg cgggacctct
540
gcgtctcacc caccgcaccc gccgtgctgg a
571

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<210> 1916

<211> 119

<212> PRT

<213> Homo sapiens

<400> 1916

Met Gly Leu His Asp Pro Arg Ser Gln Val Ser Leu Ser Met Leu Arg		
1	5	10
Gly Ala Trp His His Gly Lys Pro Thr Gln Asn Thr Trp Arg Ser His		15
	20	25
Ser Thr Thr Ser Ala Pro Ala Met Gln Asp Pro Gly Ser His Pro Leu		30
	35	40
His Pro Pro Cys Gly Thr Pro Ala Pro His Pro Glu His Pro Gln Cys		45
	50	55
Gly Thr Ala Ala Ser His Pro Leu His Leu Pro Cys Arg Ile Pro Glu		60
65	70	75
Ser His Pro Pro His Pro Pro Cys Gly Ile Pro Glu Ser His Pro Pro		80
	85	90
His Pro Pro Tyr Leu Pro His Pro Pro Cys Gly Thr Pro Ala Ser His		95

100 105 110
 Pro Pro His Pro Pro Cys Gly
 115

<210> 1917
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 1917
 nnacgcgtga ccggcgaaga tctccgcacc ctatctgcg ggtacacgcc gggtgattcc
 60
 gatatgtctt gggctgccat caccttgtag cgcggtgtcg ttgcctccgc cttggaccgt
 120
 catccctatg gcccggtgaa gtcggttaaag gtagcaggtc cggccggcca cccagccccg
 180
 gatttcgcgc ccggatgggt gtcgcaccgc ttggcagttc ccgtacatcg cacagtggcc
 240
 gactcccca ggagacactt cccggtgact catttgagc tcaatcgga gacaaccac
 300
 gtagacgtcg atgtcattga cgagcgcacg gttcgtgtat gtgttcggg ttcgccgga
 360

<210> 1918
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 1918
 Xaa Arg Val Thr Gly Glu Asp Leu Arg Thr Leu Ser Ala Gly Tyr Thr
 1 5 10 15
 Pro Gly Asp Ser Asp Met Ser Trp Ala Ala Ile Thr Leu Trp Arg Gly
 20 25 30
 Val Val Ala Ser Ala Leu Asp Arg His Pro Tyr Gly Pro Val Lys Ser
 35 40 45
 Val Lys Val Ala Gly Pro Ala Gly His Pro Ala Pro Asp Phe Ala Ala
 50 55 60
 Gly Trp Leu Leu Asp Arg Leu Ala Val Pro Val His Arg Thr Val Ala
 65 70 75 80
 Asp Ser Pro Arg Arg His Phe Pro Val Thr His Leu Gln Phe Asn Arg
 85 90 95
 Glu Thr Thr His Val Asp Val Asp Val Ile Asp Glu Arg Thr Val Arg
 100 105 110
 Val Cys Val Pro Gly Ser Pro Glu
 115 120

<210> 1919
 <211> 354
 <212> DNA
 <213> Homo sapiens

<400> 1919
 nncggcgcga gctgtgtcca ctgcgtgtc cctgccacct cggccatctg cctctctctt
 60

ccaggctgca gccatccctc ctgcactgct gaggcctggc cacgcgcac cggccacgc
 120
 ccacctccat cctctttgcc ccttactaaa cactgggagc ccgcccgcgc gcgacaggcc
 180
 aggcagcgg gaaggtgtag acgaacagcc caaaggattc agcagtgtaa gtaccccacc
 240
 tacgcactta caaagtgcag gccaccgccc agccccacct ccagacacag gcggaggcca
 300
 agctcgcggg caccgtatca tcccgtgccg tctccacct acccctgcc attg
 354

<210> 1920

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1920

Xaa	Gly	Arg	Ser	Cys	Val	His	Cys	Ala	Val	Pro	Ala	Thr	Ser	Ala	Ile
1				5					10					15	
Cys	Leu	Ser	Leu	Pro	Gly	Cys	Ser	His	Pro	Ser	Cys	Thr	Ala	Glu	Ala
			20					25					30		
Trp	Pro	Arg	Ala	Ser	Arg	Pro	Arg	Pro	Pro	Pro	Ser	Ser	Leu	Pro	Leu
			35				40					45			
Thr	Lys	His	Trp	Glu	Pro	Ala	Arg	Pro	Arg	Gln	Ala	Arg	Pro	Ala	Gly
	50					55				60					
Arg	Cys	Arg	Arg	Thr	Ala	Gln	Arg	Ile	Gln	Gln	Cys	Lys	Tyr	Pro	Thr
65				70					75					80	
Tyr	Ala	Leu	Thr	Lys	Cys	Arg	Pro	Pro	Pro	Ser	Pro	Thr	Ser	Arg	His
				85					90					95	
Arg	Arg	Arg	Pro	Ser	Ser	Arg	Ala	Pro	Tyr	His	Pro	Val	Pro	Ser	Pro
			100					105					110		
Pro	Tyr	Pro	Cys	Gln	Leu										
			115												

<210> 1921

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1921

gaattcatct ggaggcagag agatggggaa gcggtggga gaagagcaag aacggaaact
 60
 atttttaata caaatccagt catggtattg tatacacagc agcctctgtc ttccagaaac
 120
 ctacacggcc gccacaccaa agttaatgcc accaggcgtc atcacacaga tgtgaggtag
 180
 aggtgccact ccacagccgt gggcagacct gggagcccag ctctctctgg ttccacctc
 240
 cacactgccc accccatcct tctctcccag tctccactcc atcgaagcct ccagatgac
 300
 ttcattgtggg gacaggagaa ctacagatca tggctgagaa gggcgcnctg tngtcca
 357

<210> 1922

<211> 92
 <212> PRT
 <213> Homo sapiens

<400> 1922
 Met Val Leu Tyr Thr Gln Gln Pro Leu Ser Ser Arg Asn Leu His Gly
 1 5 10 15
 Arg His Thr Lys Val Asn Ala Thr Arg Arg His His Thr Asp Val Arg
 20 25 30
 Cys Arg Cys His Ser Thr Ala Val Gly Arg Pro Gly Ser Pro Ala Pro
 35 40 45
 Pro Gly Phe Thr Leu His Thr Ala His Pro Ile Leu Leu Ser Gln Ser
 50 55 60
 Pro Leu His Arg Ser Leu Pro Asp Asp Phe Met Trp Gly Gln Glu Asn
 65 70 75 80
 Tyr Arg Ser Trp Leu Arg Arg Ala Xaa Cys Xaa Pro
 85 90

<210> 1923
 <211> 368
 <212> DNA
 <213> Homo sapiens

<400> 1923
 nattnaatta tggtagagaaa aggcttatgc gttgcattgc tcgtgcttgt cacactgtca
 60
 ggtagtgcac agaagaaaga atgggttcagc aacattaaac tctcaggcta tggaatgacc
 120
 cagtatcaat atactgatca agagggaagc aaaggccatt catttaatct gcgattgttc
 180
 ccgttgccctt taaacggacg tatctttaa at gactttttatt ggaaggcaca ggcccaattc
 240
 aatggaaaca catcgacatt gggaagcagt ccacgtcttg tagacctatt tgtagagtgg
 300
 cagaaatatg attattttcaa ggtgaagtta ggccagttta agcgaccatt cacgtttgaa
 360
 aatcccag
 368

<210> 1924
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1924
 Met Val Arg Lys Gly Leu Cys Val Ala Leu Leu Val Leu Val Thr Leu
 1 5 10 15
 Ser Gly Ser Ala Gln Lys Lys Glu Trp Phe Ser Asn Ile Lys Leu Ser
 20 25 30
 Gly Tyr Gly Met Thr Gln Tyr Gln Thr Asp Gln Glu Gly Ser Lys
 35 40 45
 Gly His Ser Phe Asn Leu Arg Leu Phe Pro Leu Pro Leu Asn Gly Arg
 50 55 60
 Ile Leu Asn Asp Phe Tyr Trp Lys Ala Gln Ala Gln Phe Asn Gly Asn

1467

<212> DNA

<213> Homo sapiens

<400> 1927

nntctagaag actccaccta cttttcccca gactttcagc tctattctgg gaggcataaa
 60
 acatctgctt tgacgggtgga ggcaaccagt agcatcaggg aaaaagttgt tgaagatcct
 120
 ctttgtaact tccactcccc aaacttcctg aggatctcag aggtggaaat gagaggttcc
 180
 gaggatgcgg cagctggaac agtattgcag cggctgatcc aggaacaact gcggtatggc
 240
 accccaaccg agaacatgaa cttgctggcc attcagcacc aggccacagg gagtgcagga
 300
 ccagcccatc ctacaaacaa cttttcttcc acggaaaacc tactcaaga agaccacaa
 360
 atggtctacc agtcagcacg ccaagaaccg cagggtcaag aacaccagng tgganncaat
 420
 acggtgatgg agaaacaggt ccggtccacg cagcctcagc agaacaacga ggaactgccc
 480
 acttacgagg aggccaaagc acagcccttc acgcgt
 516

<210> 1928

<211> 172

<212> PRT

<213> Homo sapiens

<400> 1928

Xaa	Leu	Glu	Asp	Ser	Thr	Tyr	Phe	Ser	Pro	Asp	Phe	Gln	Leu	Tyr	Ser
1				5					10					15	
Gly	Arg	His	Glu	Thr	Ser	Ala	Leu	Thr	Val	Glu	Ala	Thr	Ser	Ser	Ile
			20					25					30		
Arg	Glu	Lys	Val	Val	Glu	Asp	Pro	Leu	Cys	Asn	Phe	His	Ser	Pro	Asn
		35				40					45				
Phe	Leu	Arg	Ile	Ser	Glu	Val	Glu	Met	Arg	Gly	Ser	Glu	Asp	Ala	Ala
50					55				60						
Ala	Gly	Thr	Val	Leu	Gln	Arg	Leu	Ile	Gln	Glu	Gln	Leu	Arg	Tyr	Gly
65				70					75					80	
Thr	Pro	Thr	Glu	Asn	Met	Asn	Leu	Leu	Ala	Ile	Gln	His	Gln	Ala	Thr
			85					90					95		
Gly	Ser	Ala	Gly	Pro	Ala	His	Pro	Thr	Asn	Asn	Phe	Ser	Ser	Thr	Glu
		100					105					110			
Asn	Leu	Thr	Gln	Glu	Asp	Pro	Gln	Met	Val	Tyr	Gln	Ser	Ala	Arg	Gln
		115				120					125				
Glu	Pro	Gln	Gly	Gln	Glu	His	Gln	Xaa	Gly	Xaa	Asn	Thr	Val	Met	Glu
130				135					140						
Lys	Gln	Val	Arg	Ser	Thr	Gln	Pro	Gln	Gln	Asn	Asn	Glu	Glu	Leu	Pro
145				150					155					160	
Thr	Tyr	Glu	Glu	Ala	Lys	Ala	Gln	Pro	Phe	Thr	Arg				
			165					170							

<210> 1929

<211> 843

<212> DNA

<213> Homo sapiens

<400> 1929

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nnccgcggac actcagggtc tggggtcctt cttccccaag aggcctgact gcctgggtgt
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tctccaggta catgtccttc aaggagaaat acacttcctg gcctgggcct gggccagggg
120
ccttctgggc cttgtctgga gtgcccacag cagaggctgg cttcctggta ctatctgtgc
180
cagaggaccc agggccccct gcagccctgc ctctgggctg ggtctgaacc tgctccacgc
240
ccacggggcc ctgagtccca caggagtcag gctcgtctga gctggggatg cagttttctg
300
aagaacggcg gctttgggct gccttctcta actctggctt ccgcaccttg cttggattcc
360
tcatttttct ttttcttctt ggccccactc tctctttga gggctctctg agggccccgc
420
tccatggcgt cacagatgta tgtcagcaag ccatgctctc cgtcctctcc attctcgggg
480
gcagcctccc cgttggtggt cacttctcca gaagcaaact gttgatcagg cccaaacctg
540
agtgtgagc agtctcagtc tctccctcct gccaaagccgc cagggtccca ccctcaggct
600
ccctggtagg gaccgagggg cccggcgctt gagccccgct caatcgccgc tttcgtgga
660
agcggtcggg gctgagcttg cgcagagtgt cgacctccc aggcaccgcc ttctcgtgct
720
tccagctctg ctcatctctg cgcagctttg ccgcagcctt gcgcttcaac ttggcgaacc
780
agcgctggtg gatcttgtac tcagtcatgg tgcccacctc ccaggaccct gagcaggaca
840
caa
843

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<210> 1930

<211> 120

<212> PRT

<213> Homo sapiens

<400> 1930

```

Leu Pro Gly Cys Ser Pro Gly Thr Cys Pro Ser Arg Arg Asn Thr Leu
1          5          10          15
Pro Gly Leu Gly Leu Gly Gln Gly Pro Ser Gly Pro Cys Leu Glu Cys
20          25          30
Pro Gln Gln Arg Leu Ala Ser Trp Tyr Tyr Leu Cys Gln Arg Thr Gln
35          40          45
Ala Pro Val Gln Pro Cys Leu Trp Ala Gly Ser Glu Pro Ala Pro Arg
50          55          60
Pro Arg Ala Pro Glu Ser His Arg Ser Gln Ala Arg Leu Ser Trp Gly
65          70          75          80
Cys Ser Phe Leu Lys Asn Gly Gly Phe Gly Leu Pro Ser Leu Thr Leu
85          90          95
Ala Ser Ala Pro Cys Leu Asp Ser Ser Ser Phe Phe Phe Phe Leu Ala

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Pro Leu Ser Ser Leu Arg Ala Leu
 100 105 110
 115 120

<210> 1931
 <211> 719
 <212> DNA
 <213> Homo sapiens

<400> 1931
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 60
 gtgcaagaaa caggaggaaa cccccagag cgcagcctcc tggaagcgga agggagcact
 120
 gaagaggagg tggtagtggtgtgtcagaagc tgctgagaag ccagttagat aaagcggaga
 180
 agcttcctac taggacagct tcctcccagc ccagtgtggc cacgctgggtg tcctcgggtga
 240
 ccagacacgt ggccatgaat ttctcagtgt gctttattgt tgattaaatg cagtcggctc
 300
 acgaggctga ctttggaac aggaggtccg tgggtcgtgg aataagaaag ggcacatcgg
 360
 ttgcagagga aggaaggaa gccacggct gccttgggga gctttctgaa aggcaggtct
 420
 gatcatgcct ctctgggcta cggctcctc acggtggctc ctggttgga ctgaagtgg
 480
 ccccttggtc cctctctccc atctcagcat tagccaggac ttttggttg gcggcccag
 540
 cagggtgcc cccttgcaac acttcttttc ccacatgac gtgccttcca aacctacttc
 600
 cagcgtgcc ctcttcagg agcctttcat aaccacctct ccctccact ggctaaagat
 660
 gaggttgagc aactgcagga cttgggacct tgttcctgcc cctgtggctg cctggatcc
 719

<210> 1932
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1932
 Met Pro Leu Trp Ala Thr Val Ser Ser Arg Trp Leu Leu Val Gly Thr
 1 5 10 15
 Glu Val Val Pro Leu Val Pro Leu Ser His Leu Ser Ile Ser Gln Asp
 20 25 30
 Phe Trp Leu Gly Gly Pro Ser Arg Ala Ala Pro Leu Gln His Phe Phe
 35 40 45
 Ser His Met Ile Val Pro Ser Lys Pro Thr Ser Ser Val Ala Leu Phe
 50 55 60
 Arg Glu Pro Phe Ile Thr Thr Ser Pro Phe His Trp Leu Lys Met Arg
 65 70 75 80
 Leu Ser Asn Cys Arg Thr Trp Asp Leu Val Pro Ala Pro Val Ala Ala
 85 90 95
 Trp Ile

<210> 1933
 <211> 295
 <212> DNA
 <213> Homo sapiens

<400> 1933
 ggcgccgagc tgtgggcggc catggagcgc atgcctgccg acctgattat cctcgacctg
 60
 atgctgccgg gggataacgg cctcttgctg tgccagcgcc tgcgccagca atacgcaaca
 120
 ccagtgatca tgctgaccgc catgggcgaa ctgagtgatc gcgtgggggg cctggaaatg
 180
 ggcgccgatg actacctgaa caaacctttc gatgcccgctg aattacttgc ccgggtgcgc
 240
 gctgtactgc gtccggcgctg tgaaaaccga ccgacgttgg gcgacgtgtc gcgcc
 295

<210> 1934
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1934
 Gly Ala Glu Leu Trp Ala Ala Met Glu Arg Met Pro Ala Asp Leu Ile
 1 5 10 15
 Ile Leu Asp Leu Met Leu Pro Gly Asp Asn Gly Leu Leu Leu Cys Gln
 20 25 30
 Arg Leu Arg Gln Gln Tyr Ala Thr Pro Val Ile Met Leu Thr Ala Met
 35 40 45
 Gly Glu Leu Ser Asp Arg Val Gly Gly Leu Glu Met Gly Ala Asp Asp
 50 55 60
 Tyr Leu Asn Lys Pro Phe Asp Ala Arg Glu Leu Leu Ala Arg Val Arg
 65 70 75 80
 Ala Val Leu Arg Pro Ala Cys Glu Asn Arg Pro Thr Leu Gly Asp Val
 85 90 95
 Ser Arg

<210> 1935
 <211> 298
 <212> DNA
 <213> Homo sapiens

<400> 1935
 accggtgtgg cgggcgcgcc cttcaccacc atcggtctca ccgggcccgc ggcgggttcg
 60
 caatacatcg tcgatacctt cctggtagtg gtgttcgggg gggcccaaag cctgttcggc
 120
 cccatgcgct cggcgttcgt gattgcccag acccaatcgc tgctggagtt tttcctcagt
 180
 ggctcgatgg ccaaggtgct gaccttgctg tcggtgatc tgatcctgat gctgcgcccc
 240

caagggttgt tctccatcaa agtgcgcaag taaaggcgag cagataaggg tttaagca
298

<210> 1936
<211> 90
<212> PRT
<213> Homo sapiens

<400> 1936
Thr Gly Val Ala Gly Ala Ala Phe Thr Thr Ile Gly Ser Thr Gly Pro
1 5 10 15
Thr Ala Gly Ser Gln Tyr Ile Val Asp Thr Phe Leu Val Val Val Phe
20 25 30
Gly Gly Ala Gln Ser Leu Phe Gly Pro Ile Ala Ser Ala Phe Val Ile
35 40 45
Ala Gln Thr Gln Ser Leu Ser Glu Phe Phe Leu Ser Gly Ser Met Ala
50 55 60
Lys Val Leu Thr Leu Ser Ser Val Ile Leu Ile Leu Met Leu Arg Pro
65 70 75 80
Gln Gly Leu Phe Ser Ile Lys Val Arg Lys
85 90

<210> 1937
<211> 513
<212> DNA
<213> Homo sapiens

<400> 1937
gcacggcgca cagtaacacc aactcgaaag agaccttatg aatgcaagggt gtgcgggaaa
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gcctttaatt ctcccaattt atttcaaadc catcaaagaa ctcacactgg aaagagggtcc
120
tataaatgta gggaaatagt gagagccttc acagtttcca gtttctttcg aaaacatgga
180
aaaatgcata ctggagaaaa acgctatgaa tgtaaataact gtggaaaacc tatcgattat
240
cccagtttat ttcaaattca tggtagaact cactctggag aaaaacccta caaatgtaaa
300
caatgtggta aagccttcat ttccgcaggt tacgttcgga cacatgaaat cagatctcac
360
gcgctggaga aatcccacca atgtcaggaa tgtgggaaga aactcagttg ttccagttcc
420
cttcacagac atgaaagaac tcatagtgga ggaaaactct acgaatgtca aaaatgtgac
480
caagtcttta gatgtccac gtccttcac gcg
513

<210> 1938
<211> 171
<212> PRT
<213> Homo sapiens

<400> 1938
Ala Arg Arg Thr Val Thr Pro Thr Arg Lys Arg Pro Tyr Glu Cys Lys

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      1           5           10           15
Val Cys Gly Lys Ala Phe Asn Ser Pro Asn Leu Phe Gln Ile His Gln
      20           25           30
Arg Thr His Thr Gly Lys Arg Ser Tyr Lys Cys Arg Glu Ile Val Arg
      35           40           45
Ala Phe Thr Val Ser Ser Phe Phe Arg Lys His Gly Lys Met His Thr
      50           55           60
Gly Glu Lys Arg Tyr Glu Cys Lys Tyr Cys Gly Lys Pro Ile Asp Tyr
      65           70           75           80
Pro Ser Leu Phe Gln Ile His Val Arg Thr His Ser Gly Glu Lys Pro
      85           90           95
Tyr Lys Cys Lys Gln Cys Gly Lys Ala Phe Ile Ser Ala Gly Tyr Val
      100          105          110
Arg Thr His Glu Ile Arg Ser His Ala Leu Glu Lys Ser His Gln Cys
      115          120          125
Gln Glu Cys Gly Lys Lys Leu Ser Cys Ser Ser Ser Leu His Arg His
      130          135          140
Glu Arg Thr His Ser Gly Gly Lys Leu Tyr Glu Cys Gln Lys Cys Asp
      145          150          155          160
Gln Val Phe Arg Cys Pro Thr Ser Leu His Ala
      165          170

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<210> 1939

<211> 1233

<212> DNA

<213> Homo sapiens

<400> 1939

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gccggcagcg ccgctcccca gggagggaggt ccgcagcctg aggtcttctc caagaaaaaa
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aaagaaaaaa aaacaacatg gctgcaaagg agaaactgga ggcagtgtta aatgtggccc
120
tgagggtgcc aagcatcatg ctgttgatg tctgtacag atgggatgtc agtcctttt
180
tccagcagat ccaaagaagt agccttagta ataaccctct tttccagtat aagtatttgg
240
ctcttaatat gcattatgta gggtatatct taagtgtggg gctgctaaca ttgccaggc
300
agcatctggg tcagctttat ctatattttt tgactgctct gctcctctat gctggacatc
360
aaatttccag ggactatgtt cggagtgaac tggggtttgc ctatgaggga ccaatgtatt
420
tagaacctct ctctatgaat cggtttacca cagccttaat aggtcagttg gtgggtgtgta
480
ctttatgctc ctgtgtcatg aaaacaaagc agatttggct gttttcagct cacatgcttc
540
ctctgctagc acgactctgc cttgttccct tggagacaat tgctatcatc aataaatttg
600
ctatgatttt tactggattg gaagttctct attttcttgg gtctaattct ttggtacctt
660
ataaccttgc taaatctgca tacagagaat tggttcaggt agtggaggta tatggccttc
720
tcgccttggg aatgtccctg tggaatcaac tggtagtccc tggtcttttc atgggtttct
780

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ggctcgtctt atttgcctt cagatttact cctatttcag tactcgagat cagcctgcat
 840
 cacgtgagag gcttcttttc ctttttctga caaggtaatt aataagagcc tatgatacta
 900
 tatataacct tagaaagaga aaactttgat ctaggaatag taagttttgc agattacttt
 960
 tatcgttcat gttacacaac ttcgtatttt gttaagatag gattttcatt cactggatac
 1020
 ctaggttttg caatgcagag aggtgctaac ataataatgt ggtttatttg gctgcactat
 1080
 ggaccagagt gtagcaaatg atttgtggaa aggtacatag cacatcgtaa aagtattttt
 1140
 tcaatttcaa gttaaaatta ttgggtcaat cagaaaaaag tatattataa aaataacatt
 1200
 tattgagtat tttaaatgta ccataccatt naa
 1233

<210> 1940

<211> 266

<212> PRT

<213> Homo sapiens

<400> 1940

Met	Ala	Ala	Lys	Glu	Lys	Leu	Glu	Ala	Val	Leu	Asn	Val	Ala	Leu	Arg
1			5						10					15	
Val	Pro	Ser	Ile	Met	Leu	Leu	Asp	Val	Leu	Tyr	Arg	Trp	Asp	Val	Ser
			20					25					30		
Ser	Phe	Phe	Gln	Gln	Ile	Gln	Arg	Ser	Ser	Leu	Ser	Asn	Asn	Pro	Leu
			35				40						45		
Phe	Gln	Tyr	Lys	Tyr	Leu	Ala	Leu	Asn	Met	His	Tyr	Val	Gly	Tyr	Ile
			50				55					60			
Leu	Ser	Val	Val	Leu	Leu	Thr	Leu	Pro	Arg	Gln	His	Leu	Val	Gln	Leu
65					70					75				80	
Tyr	Leu	Tyr	Phe	Leu	Thr	Ala	Leu	Leu	Leu	Tyr	Ala	Gly	His	Gln	Ile
				85					90					95	
Ser	Arg	Asp	Tyr	Val	Arg	Ser	Glu	Leu	Gly	Phe	Ala	Tyr	Glu	Gly	Pro
			100					105					110		
Met	Tyr	Leu	Glu	Pro	Leu	Ser	Met	Asn	Arg	Phe	Thr	Thr	Ala	Leu	Ile
			115				120					125			
Gly	Gln	Leu	Val	Val	Cys	Thr	Leu	Cys	Ser	Cys	Val	Met	Lys	Thr	Lys
			130				135				140				
Gln	Ile	Trp	Leu	Phe	Ser	Ala	His	Met	Leu	Pro	Leu	Leu	Ala	Arg	Leu
145					150					155				160	
Cys	Leu	Val	Pro	Leu	Glu	Thr	Ile	Ala	Ile	Ile	Asn	Lys	Phe	Ala	Met
				165					170					175	
Ile	Phe	Thr	Gly	Leu	Glu	Val	Leu	Tyr	Phe	Leu	Gly	Ser	Asn	Leu	Leu
			180					185					190		
Val	Pro	Tyr	Asn	Leu	Ala	Lys	Ser	Ala	Tyr	Arg	Glu	Leu	Val	Gln	Val
			195				200					205			
Val	Glu	Val	Tyr	Gly	Leu	Leu	Ala	Leu	Gly	Met	Ser	Leu	Trp	Asn	Gln
			210				215					220			
Leu	Val	Val	Pro	Val	Leu	Phe	Met	Val	Phe	Trp	Leu	Val	Leu	Phe	Ala
225					230					235				240	
Leu	Gln	Ile	Tyr	Ser	Tyr	Phe	Ser	Thr	Arg	Asp	Gln	Pro	Ala	Ser	Arg

245 250 255
 Glu Arg Leu Leu Phe Leu Phe Leu Thr Arg
 260 265
 <210> 1941
 <211> 411
 <212> DNA
 <213> Homo sapiens
 <400> 1941
 ctggggccct gccccacagc atcatgatgg ggaaactccc cctggggggtc gtctccccctt
 60
 atgtgaagat gagttcgggg ggctacacgg accccctgaa attctacgcc accagctact
 120
 gcacagccta cggtcgggag gatttcaagc cccgtgtggg cagtcacgta ggcaccggct
 180
 acaaataaaa tttccagccc gtggtctcat gccaaagccag tctggaggcc ttagacaacc
 240
 cggccagggg ggaacaagcc caggaccatt tccagtctgt ggccagccag agctaccgcc
 300
 ccctggaggt gcctgacggc aagcatcccc tgccctggag catgcgccag accagctcag
 360
 gctatgggag ggagaagccc agtgcgggtc cccccaccaa ggaggtccgg a
 411

<210> 1942
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 1942
 Met Met Gly Lys Leu Pro Leu Gly Val Val Ser Pro Tyr Val Lys Met
 1 5 10 15
 Ser Ser Gly Gly Tyr Thr Asp Pro Leu Lys Phe Tyr Ala Thr Ser Tyr
 20 25 30
 Cys Thr Ala Tyr Gly Arg Glu Asp Phe Lys Pro Arg Val Gly Ser His
 35 40 45
 Val Gly Thr Gly Tyr Lys Ser Asn Phe Gln Pro Val Val Ser Cys Gln
 50 55 60
 Ala Ser Leu Glu Ala Leu Asp Asn Pro Ala Arg Gly Glu Gln Ala Gln
 65 70 75 80
 Asp His Phe Gln Ser Val Ala Ser Gln Ser Tyr Arg Pro Leu Glu Val
 85 90 95
 Pro Asp Gly Lys His Pro Leu Pro Trp Ser Met Arg Gln Thr Ser Ser
 100 105 110
 Gly Tyr Gly Arg Glu Lys Pro Ser Ala Gly Pro Pro Thr Lys Glu Val
 115 120 125
 Arg

<210> 1943
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 1943

nagaaacatt caggggtcca acaggggtgga aaacatgagg ctgcaggatg tttaacagga
60
gtctttgctg cagctcctct tggagccttt aacgagatac tatcatgcct atgaactgcc
120
acacagatgt acatggcata gcaactgccc aaagtatcag cccaaggaac cctactttcc
180
ccagcaacat ctaactcaga aatgctgac tttggcctca atctgggtccc aaaatacctc
240
caggggtattt tgggcttcgg tgtgttcaca cacttgggtca tgtaaactctg aacacagact
300
ctctctgcct tggcaagaac cccccacacc cccatagata attacaccct ttggttctcc
360
ctctgcaatc tcacctgcta gagacg
386

<210> 1944

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1944

Met	Gly	Val	Trp	Gly	Val	Leu	Ala	Lys	Ala	Glu	Arg	Val	Cys	Val	Gln
1				5					10					15	
Ile	Tyr	Met	Thr	Lys	Cys	Val	Asn	Thr	Pro	Lys	Pro	Lys	Ile	Pro	Trp
			20					25					30		
Arg	Tyr	Phe	Gly	Thr	Arg	Leu	Arg	Pro	Lys	Ile	Ser	Ile	Ser	Glu	Leu
		35				40						45			
Asp	Val	Ala	Gly	Glu	Ser	Arg	Val	Pro	Trp	Ala	Asp	Thr	Phe	Gly	Gln
	50					55					60				
Cys	Tyr	Ala	Met	Tyr	Ile	Cys	Val	Ala	Val	His	Arg	His	Asp	Ser	Ile
65					70					75				80	
Ser	Leu	Lys	Ala	Pro	Arg	Gly	Ala	Ala	Ala	Lys	Thr	Pro	Val	Lys	His
				85					90					95	
Pro	Ala	Ala	Ser	Cys	Phe	Pro	Pro	Cys	Trp	Ser	Pro	Glu	Cys	Phe	
			100					105						110	

<210> 1945

<211> 443

<212> DNA

<213> Homo sapiens

<400> 1945

nacgcgtcac gaagcgcgct cggccacgt ggctccaagg gcgtccacgc gccctcctc
60
gaccgattgg tgtcgaacat ggcacggtgg catgcgacgc gcaccaagat ccagctcaag
120
ctcgcgatcc agcgantcgg catgctacag gagaaaaaag ccgcactgca taaaaaagtg
180
cgactggaaa ttgcggacnn tcgtagacgc caaaagcttg aatctgcgcg cgtcaaaacc
240
gaatcgtga tcatggacga tatacatctg gagttgcttg aactgcttga gctctactgt
300

gagacactct atgccagatt cggattacta gaaggacgcg acaatgagcc tgatgatgcg
 360
 atccgcgagc cgatgatcgc cattattcat gcggctcatc gcacagaggt gaaggaacta
 420
 catgtgctcc aaaacatgct gaa
 443

<210> 1946

<211> 147

<212> PRT

<213> Homo sapiens

<400> 1946

Xaa	Ala	Ser	Arg	Ser	Ala	Leu	Gly	Pro	Arg	Gly	Ser	Lys	Gly	Val	His
1				5					10					15	
Ala	Pro	Leu	Leu	Asp	Arg	Leu	Val	Ser	Asn	Met	Ala	Arg	Trp	His	Ala
			20					25					30		
Thr	Arg	Thr	Lys	Ile	Gln	Leu	Lys	Leu	Ala	Ile	Gln	Arg	Xaa	Gly	Met
			35				40					45			
Leu	Gln	Glu	Lys	Lys	Ala	Ala	Leu	His	Lys	Lys	Val	Arg	Leu	Glu	Ile
			50			55					60				
Ala	Asp	Xaa	Arg	Arg	Arg	Gln	Lys	Leu	Glu	Ser	Ala	Arg	Val	Lys	Thr
65					70					75				80	
Glu	Ser	Leu	Ile	Met	Asp	Asp	Ile	His	Leu	Glu	Leu	Leu	Glu	Leu	Leu
			85					90					95		
Glu	Leu	Tyr	Cys	Glu	Thr	Leu	Tyr	Ala	Arg	Phe	Gly	Leu	Leu	Glu	Gly
			100					105					110		
Arg	Asp	Asn	Glu	Pro	Asp	Asp	Ala	Ile	Arg	Glu	Pro	Met	Ile	Ala	Ile
			115					120					125		
Ile	His	Ala	Ala	His	Arg	Thr	Glu	Val	Lys	Glu	Leu	His	Val	Leu	Gln
			130				135						140		
Asn	Met	Leu													

<210> 1947

<211> 472

<212> DNA

<213> Homo sapiens

<400> 1947

cggccgtgta ggccgtgacg gtgaccaaca gagccacagc gggcccgtg taggcgggag
 60
 gactgtgccg caggtgcagg agggtcagat ggaaacaaaa ggcgcaggcg gcctccacaa
 120
 gcgccccgtg gggcacggat gtgcgcaggc ccgagctgca gctctgggcc atgaggctct
 180
 gcagcagggtg caggtcactg agctcccagg cccagcagag gcgcgtcagg gtgcaggcgg
 240
 cctgcatgcc cagcccctgt gccgccagct tcagcagcgt gccaggcaga gactcctcgg
 300
 ccatgaggaa ctcttcgagg gacacgggtg ggttggccga gggcccgtcc aaggtgaccc
 360
 cgtgcgccag gaagagcagg aagagcaggg tgagcagcag gtcaggccca aagtccccag
 420

cccagggccc gagctcgaac agcgtcctca tctccaggaa gcaggcccg ag
472

<210> 1948

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1948

Met	Arg	Thr	Leu	Phe	Glu	Leu	Gly	Pro	Trp	Ala	Gly	Asp	Phe	Gly	Pro
1				5				10						15	
Asp	Leu	Leu	Leu	Thr	Leu	Leu	Phe	Leu	Leu	Phe	Leu	Ala	His	Gly	Val
			20					25						30	
Thr	Leu	Asp	Gly	Ala	Ser	Ala	Asn	Pro	Thr	Val	Ser	Leu	Gln	Glu	Phe
			35				40						45		
Leu	Met	Ala	Glu	Glu	Ser	Leu	Pro	Gly	Thr	Leu	Leu	Lys	Leu	Ala	Ala
	50					55				60					
Gln	Gly	Leu	Gly	Met	Gln	Ala	Ala	Cys	Thr	Leu	Thr	Arg	Leu	Cys	Trp
65				70					75					80	
Ala	Trp	Glu	Leu	Ser	Asp	Leu	His	Leu	Leu	Gln	Ser	Leu	Met	Ala	Gln
				85					90					95	
Ser	Cys	Ser	Ser	Ala	Leu	Arg	Thr	Ser	Val	Pro	His	Gly	Ala	Leu	Val
			100				105						110		
Glu	Ala	Ala	Cys	Ala	Phe	Cys	Phe	His	Leu	Thr	Leu	Leu	His	Leu	Arg
		115					120						125		
His	Ser	Pro	Pro	Ala	Tyr	Ser	Gly	Pro	Ala	Val	Ala	Leu	Leu	Val	Thr
	130					135					140				
Val	Thr	Ala	Tyr	Thr	Ala										
145					150										

<210> 1949

<211> 395

<212> DNA

<213> Homo sapiens

<400> 1949

acgcgttgag ggaggcgaca tgcttcatga gcgcttggcg ccaactgctca agcgacatct
60
gccccttgct gatgttgcaa ggcggacagg acggcatgta attcgactcg acgtcacgct
120
ccggatgcct cgacggggacg ctcacaagct tccattggcc attcgcgggg cgcttggtct
180
cgaccgcgcg tacaaccggg tctacatggt cgccatgcca ccgatcgggc aatggcattc
240
cacagtacgc gcagcggccg togtatttgc gccggagccg atcgcgctgt gctttcgtca
300
gccggctcac gctttatgct ccacggcagg tgtggcagca tcttggcagg cgactccaag
360
atccgcgcct gcgtccagct tgacggcgcc ggggtt
395

<210> 1950

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1950

```

Met Leu His Glu Arg Leu Ala Pro Leu Leu Lys Arg His Leu Pro Leu
 1           5           10           15
Ala Asp Val Ala Arg Arg Thr Gly Arg His Val Ile Arg Leu Asp Val
      20           25           30
Thr Leu Arg Met Pro Arg Arg Asp Ala His Lys Leu Pro Leu Ala Ile
      35           40           45
Arg Gly Ser Leu Gly Leu Asp Arg Ala Tyr Asn Arg Val Tyr Met Val
      50           55           60
Ala Met Pro Pro Ile Gly Gln Trp His Ser Thr Val Arg Ala Ala Ala
      65           70           75           80
Val Val Phe Ala Pro Glu Pro Ile Ala Leu Cys Phe Arg Gln Pro Ala
      85           90           95
His Ala Leu Cys Ser Thr Ala Gly Val Ala Ala Ser Trp Gln Ala Thr
      100          105          110
Pro Arg Ser Ala Pro Ala Ser Ser Leu Thr Ala Pro Gly
      115          120          125

```

<210> 1951

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1951

```

cggccgcccgc ctctccgctc ccggggccccc gccgccaccg cgccccccgc gggagatgga
60
acagcgggaac cggctcggtg cctcgggata cctgccgcct ctgctgctgc atgccctgct
120
gctcttcgtg gccgacgctg cattcacaga agtccccaaa gatgtgacag tacgggaggg
180
agacgacatc gaaatgccct gcgcgttccg ggccagcgga gccacctcgt attcgtctgga
240
gattcagtgg tggtaacctca aggagccacc ccgggagctg ctgcacgagc tggcgctcag
300
cgtgccgggc gcccgagca aggtaacaaa taaggatgca actaaaatca gcaccgtacg
360
cgt
363

```

<210> 1952

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1952

```

Arg Pro Pro Pro Leu Arg Ser Arg Ala Pro Ala Ala Thr Ala Pro Pro
 1           5           10           15
Ala Gly Asp Gly Thr Ala Glu Pro Ala Arg Cys Pro Arg Ile Pro Ala
      20           25           30
Ala Ser Ala Ala Ala Cys Pro Ala Ala Leu Arg Gly Arg Arg Cys Ile
      35           40           45
His Arg Ser Pro Gln Arg Cys Asp Ser Thr Gly Gly Arg Arg His Arg

```

```

      50              55              60
Asn Ala Leu Arg Val Pro Gly Gln Arg Ser His Leu Val Phe Ala Gly
65              70              75              80
Asp Ser Val Val Val Pro Gln Gly Ala Thr Pro Gly Ala Ala Arg
      85              90              95
Ala Gly Ala Gln Arg Ala Gly Arg Pro Glu Gln Gly Asn Lys
      100              105              110

```

<210> 1953

<211> 329

<212> DNA

<213> Homo sapiens

<400> 1953

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acgcgtcagc ctgagcccaa taactataaa agagtcgcaa ccatgactgt gctattgagt
60
gagcgcagcc agattttccg ggggtccgat gcctacgcgg tgctggacta cgtaaccag
120
catgtgggca gccactgcat tcgcctgcct cccaagggcc ggccacgggc gagtatcagc
180
catcgcacct ttgccagcct ggacctgtgc cgcacagct acggcgctcc ggtacgggtc
240
acatcggtgg cgctggagac catctatcac ctgcagatcc tgttgagcgg gcattgccgc
300
tccagctccc gtggtgagga tgacgtggn
329

```

<210> 1954

<211> 109

<212> PRT

<213> Homo sapiens

<400> 1954

```

Thr Arg Gln Pro Glu Pro Asn Asn Tyr Lys Arg Val Ala Thr Met Thr
1              5              10              15
Val Leu Leu Ser Glu Arg Ser Gln Ile Phe Arg Gly Ala Asp Ala Tyr
      20              25              30
Ala Val Ser Asp Tyr Val Asn Gln His Val Gly Ser His Cys Ile Arg
      35              40              45
Leu Pro Pro Lys Gly Arg Pro Arg Ala Ser Ile Ser His Arg Thr Phe
      50              55              60
Ala Ser Leu Asp Leu Cys Arg Ile Ser Tyr Gly Ala Pro Val Arg Val
65              70              75              80
Thr Ser Val Ala Leu Glu Thr Ile Tyr His Leu Gln Ile Leu Leu Ser
      85              90              95
Gly His Cys Arg Ser Ser Ser Arg Gly Glu Asp Asp Val
      100              105

```

<210> 1955

<211> 415

<212> DNA

<213> Homo sapiens

<400> 1955

acgcgtggct cgacgaaaac caagtacgag acatgcccga caaggctacta tcacacatgg
 60
 tggaatactg ctggggggcgc ttcacagaca acatcaaata cgctgtagct gcccaatatt
 120
 ggaaagggcc acacaagccc gatagtgacc atcaacggat cattgtaggc tatttcaaaa
 180
 ccgccaaaca agccatgaac gcagcaaaac aattccactg gaacacccgg ctacaacaac
 240
 aatggaaaac atggatactc ccagtccaca acggcacctg gtccgagttt ttcacccaac
 300
 aaaaaacttt gctagacgag caagacgata gcaatagcga gctgccggag catctacaaa
 360
 acgtcatgtg cggcaaaaca ctccaccacc aagacgacac catatcgtgg tgcac
 415

<210> 1956

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1956

Met	Pro	Asp	Lys	Val	Leu	Ser	His	Met	Val	Glu	Tyr	Cys	Trp	Gly	Arg
1			5					10						15	
Phe	Thr	Asp	Asn	Ile	Lys	Tyr	Ala	Val	Ala	Ala	Gln	Tyr	Trp	Lys	Gly
		20					25						30		
Pro	His	Lys	Pro	Asp	Ser	Asp	His	Gln	Arg	Ile	Ile	Val	Gly	Tyr	Phe
		35					40					45			
Lys	Thr	Ala	Lys	Gln	Ala	Met	Asn	Ala	Ala	Lys	Gln	Phe	His	Trp	Asn
		50				55					60				
Thr	Arg	Leu	Gln	Gln	Gln	Trp	Lys	Thr	Trp	Ile	Leu	Pro	Val	His	Asn
				70						75					80
Gly	Thr	Val	Ser	Glu	Phe	Phe	Thr	Gln	Gln	Lys	Thr	Leu	Leu	Asp	Glu
			85						90					95	
Gln	Asp	Asp	Ser	Asn	Ser	Glu	Leu	Pro	Glu	His	Leu	Gln	Asn	Val	Met
			100					105					110		
Cys	Gly	Lys	Thr	Leu	His	His	Gln	Asp	Asp	Thr	Ile	Ser	Trp	Cys	
		115					120						125		

<210> 1957

<211> 526

<212> DNA

<213> Homo sapiens

<400> 1957

acgcgttccg gagagatttt cctaacctct ctccgagctg ctgagccgat cgggtgaccac
 60
 caggagctcc tcctgtgag gacaaagttc cagagtcggg gtcacggggc ttacttattg
 120
 gggaggaggc ccgccggggc cgcagtgggc gaggggccct tggcgcgctc ctgggaggtc
 180
 agacctggca cagtgtggcg aaggtttcca gtgcgatccc gagtcgaggg cgcatttcgc
 240
 ggtgactgcc agcatgaacc gcagccgacc gagttctgcg atcgggcttc tccgcagagt
 300

ggggaccctg gggaaggcgc caacttctct cctctgccca cctcactccc cgcgggcgctc
 360
 cctggggcgc ctgcccgggc cgcactgggc ggctccatc gtccttccc tctacctgca
 420
 ctgccccagg cgaggagag gccttgcccc nncgaggac cagctgcagc gggcagcggg
 480
 gtctgtctcc cccaaccccc gccccatggc acggggctga accggt
 526

<210> 1958
 <211> 175
 <212> PRT
 <213> Homo sapiens

<400> 1958
 Thr Arg Ser Gly Glu Ile Phe Leu Thr Ser Leu Arg Ala Ala Glu Pro
 1 5 10 15
 Ile Gly Asp His Gln Glu Leu Leu Pro Val Arg Thr Lys Phe Gln Ser
 20 25 30
 Arg Gly His Gly Pro Tyr Leu Leu Gly Arg Arg Pro Ala Gly Ala Ala
 35 40 45
 Val Gly Glu Gly Pro Leu Ala Arg Ser Trp Glu Val Arg Pro Gly Thr
 50 55 60
 Val Trp Arg Arg Phe Pro Val Arg Ser Arg Val Glu Gly Ala Phe Arg
 65 70 75 80
 Gly Asp Cys Gln His Glu Pro Gln Pro Thr Glu Phe Cys Asp Arg Ala
 85 90 95
 Ser Pro Gln Ser Gly Asp Pro Gly Glu Gly Ala Asn Phe Ser Pro Leu
 100 105 110
 Pro Thr Ser Leu Pro Ala Gly Val Pro Gly Pro Pro Ala Arg Ala Ala
 115 120 125
 Leu Gly Gly Leu His Arg Pro Phe Pro Leu Pro Ala Leu Pro Gln Ala
 130 135 140
 Gly Glu Arg Pro Trp Pro Xaa Glu Gly Pro Ala Ala Ala Gly Ser Gly
 145 150 155 160
 Val Leu Leu Pro Gln Pro Pro Pro His Gly Thr Gly Leu Asn Arg
 165 170 175

<210> 1959
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 1959
 gtgcaccgga cggctcctcc aacggatcat gcgacggccc agcggaaggc tcacccgagt
 60
 cgtcagaagg atcagggcgc ttgtcgtcgt cagacttcag gacatccac gacatggtga
 120
 acggctggga ggagacctg tccccgtcgg tcttggcgcc gacaacaaca ccgctcatgg
 180
 tgtattttcc ggcatgagt aagaaccagt gggcatgctg atgacccttg atcggcagtg
 240
 aggtccttt gaccacctga tatgtgtcat cagcaggaa ggtgccgagt ttggcgttct
 300

cgtctgcctc gggatgaattg ccgaggaggt acatcttgcc tggacccgta atcgcggtga
 360
 agtcgacgcg caacgcgt
 378

<210> 1960
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 1960
 Met Tyr Leu Leu Gly Asn Ser Pro Glu Ala Asp Glu Asn Ala Lys Leu
 1 5 10 15
 Gly Thr Phe Leu Ala Asp Asp Thr Tyr Gln Val Val Lys Gly Ala Ser
 20 25 30
 Leu Pro Ile Lys Gly His Gln His Ala His Trp Phe Phe Thr His Ala
 35 40 45
 Gly Lys Tyr Thr Met Ser Gly Val Val Val Gly Ala Lys Thr Asp Gly
 50 55 60
 Asp Lys Val Ser Ser Gln Pro Phe Thr Met Ser Trp Asp Val Leu Lys
 65 70 75 80
 Ser Asp Asp Asp Lys Arg Pro Asp Pro Ser Asp Asp Ser Gly Glu Pro
 85 90 95
 Ser Ala Gly Pro Ser His Asp Pro Leu Glu Glu Pro Ser Gly Ala
 100 105 110

<210> 1961
 <211> 384
 <212> DNA
 <213> Homo sapiens

<400> 1961
 ggatccaccc cggaaaccgg caggatgaag ggggcaagtg aggagaagct ggcattctgtg
 60
 tccaacctgg tcaactgtgtt tgagaatagc aggacccag aagcagcacc cagaggccag
 120
 aggctagagg acgtgcatca ccgccctgag tgcaggcctc ccgagtcacc aggaccacgg
 180
 gagaagacga atgtcgggga ggccgtgggg tctgagccca ggacagtcag caggaggtac
 240
 ctgaactccc tgaagaacaa gctgtccagc gaagcctgga ggaaatcttg ccagcctgtg
 300
 accctctcag gatcggggac gcaggagcca gagaagaaga tcgtccagga gctgctggag
 360
 acagagcagg cctatgtggc gcgc
 384

<210> 1962
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 1962
 Gly Ser Thr Pro Glu Thr Gly Arg Met Lys Gly Ala Ser Glu Glu Lys

```

      1           5           10           15
Leu Ala Ser Val Ser Asn Leu Val Thr Val Phe Glu Asn Ser Arg Thr
      20           25           30
Pro Glu Ala Ala Pro Arg Gly Gln Arg Leu Glu Asp Val His His Arg
      35           40           45
Pro Glu Cys Arg Pro Pro Glu Ser Pro Gly Pro Arg Glu Lys Thr Asn
      50           55           60
Val Gly Glu Ala Val Gly Ser Glu Pro Arg Thr Val Ser Arg Arg Tyr
      65           70           75           80
Leu Asn Ser Leu Lys Asn Lys Leu Ser Ser Glu Ala Trp Arg Lys Ser
      85           90           95
Cys Gln Pro Val Thr Leu Ser Gly Ser Gly Thr Gln Glu Pro Glu Lys
      100          105          110
Lys Ile Val Gln Glu Leu Leu Glu Thr Glu Gln Ala Tyr Val Ala Arg
      115          120          125

```

<210> 1963
 <211> 323
 <212> DNA
 <213> Homo sapiens

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<400> 1963
nnncccttcc taccctccca tactccccac cctcttctct cccctgtgac tgagcttgca
60
ggcatgaaac acccacctgg cctctctccc tctgttttgc ccttctgtc gtctctctcc
120
cacagctgcc tggctcttcg gcgtcagtc accaccttct gcagctctcc ctcaccctgg
180
cgaccactca ggcatgcac tcgcggggcc ccttcagacc tctcggggtc atcttcccct
240
tcctggcca ttatttttct tcatctgggc tgggcccga gggcggttcc ccccttctct
300
cttctttctt ttttttctc ttt
323

```

<210> 1964
 <211> 107
 <212> PRT
 <213> Homo sapiens

```

<400> 1964
Xaa Pro Phe Leu Pro Ser His Thr Pro His Pro Ser Ser Ser Pro Cys
      1           5           10           15
Ala Glu Leu Ala Gly Met Lys His Pro Pro Gly Leu Ser Pro Ser Val
      20           25           30
Leu Pro Leu Leu Ser Ser Leu Ser His Ser Cys Leu Ala Leu Arg Arg
      35           40           45
Gln Ser Thr Thr Phe Cys Ser Ser Pro Ser Pro Trp Arg Pro Leu Arg
      50           55           60
His Ala Ser Arg Gly Pro Pro Ser Asp Leu Ser Gly Ser Ser Ser Pro
      65           70           75           80
Ser Leu Ala Ile Ile Phe Leu His Leu Gly Trp Ala Arg Arg Gly Val
      85           90           95
Pro Pro Leu Pro Leu Leu Ser Phe Phe Phe Ser

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100

105

<210> 1965

<211> 1416

<212> DNA

<213> Homo sapiens

<400> 1965

cggtctggggc aggagctgga cgacgccacc atggacctgg agcagcagcg gcagcttgtg
60
agcaccctgg agaagaagca gcgcaagttt gaccagcttc tggcagagga gaaggcagct
120
gtacttcggg cagtggagga acgtgagcgg gccgaggcag agggccggga gcgtgaggct
180
cgggcccctgt cactgacacg ggcactggag gaggagcagg aggcacgtga ggagctggag
240
cggcagaacc gggccctgcg ggctgagctg gaggcactgc tgagcagcaa ggatgacgtc
300
ggcaagagcg tgcattgagct ggaacgagcc tgccgggtag cagaacaggc agccaatgat
360
ctgcgagcac aggtgacaga actggaggat gagctgacag cggccgagga tgccaagctg
420
cgtctggagg tgactgtgca ggctctcaag actcagcatg agcgtgacct gcagggccgt
480
gatgaggctg gtgaagagag gcggaggcag ctggccaagc agctgagaga tgcagagggtg
540
gagcgggatg aggagcggaa gcagcgcact ctggccgtgg ctgcccga gaagctggag
600
ggagagctgg aggagctgaa ggctcagatg gcctctgccg gccagggcaa ggaggaggcg
660
gtgaagcagc ttcgcaagat gcaggcccag atgaaggagc tatggcgga ggtggaggag
720
acacgcacct cccgggagga gatcttctcc cagaatcgga aaagtga aaa gcgcctcaag
780
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1320
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1380

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1416

<210> 1966

<211> 472

<212> PRT

<213> Homo sapiens

<400> 1966

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Arg	Gln	Leu	Val	Ser	Thr	Leu	Glu	Lys	Lys	Gln	Arg	Lys	Phe	Asp	Gln
			20					25					30		
Leu	Leu	Ala	Glu	Glu	Lys	Ala	Ala	Val	Leu	Arg	Ala	Val	Glu	Glu	Arg
		35					40					45			
Glu	Arg	Ala	Glu	Ala	Glu	Gly	Arg	Glu	Arg	Glu	Ala	Arg	Ala	Leu	Ser
50						55					60				
Leu	Thr	Arg	Ala	Leu	Glu	Glu	Gln	Glu	Ala	Arg	Glu	Glu	Leu	Glu	
65					70				75					80	
Arg	Gln	Asn	Arg	Ala	Leu	Arg	Ala	Glu	Leu	Glu	Ala	Leu	Leu	Ser	Ser
			85					90						95	
Lys	Asp	Asp	Val	Gly	Lys	Ser	Val	His	Glu	Leu	Glu	Arg	Ala	Cys	Arg
			100					105					110		
Val	Ala	Glu	Gln	Ala	Ala	Asn	Asp	Leu	Arg	Ala	Gln	Val	Thr	Glu	Leu
		115					120					125			
Glu	Asp	Glu	Leu	Thr	Ala	Ala	Glu	Asp	Ala	Lys	Leu	Arg	Leu	Glu	Val
130						135					140				
Thr	Val	Gln	Ala	Leu	Lys	Thr	Gln	His	Glu	Arg	Asp	Leu	Gln	Gly	Arg
145					150					155				160	
Asp	Glu	Ala	Gly	Glu	Glu	Arg	Arg	Arg	Gln	Leu	Ala	Lys	Gln	Leu	Arg
			165					170						175	
Asp	Ala	Glu	Val	Glu	Arg	Asp	Glu	Glu	Arg	Lys	Gln	Arg	Thr	Leu	Ala
			180					185					190		
Val	Ala	Ala	Arg	Lys	Lys	Leu	Glu	Gly	Glu	Leu	Glu	Glu	Leu	Lys	Ala
		195					200				205				
Gln	Met	Ala	Ser	Ala	Gly	Gln	Gly	Lys	Glu	Glu	Ala	Val	Lys	Gln	Leu
210						215					220				
Arg	Lys	Met	Gln	Ala	Gln	Met	Lys	Glu	Leu	Trp	Arg	Glu	Val	Glu	Glu
225					230					235				240	
Thr	Arg	Thr	Ser	Arg	Glu	Glu	Ile	Phe	Ser	Gln	Asn	Arg	Glu	Ser	Glu
			245					250						255	
Lys	Arg	Leu	Lys	Gly	Leu	Glu	Ala	Glu	Val	Leu	Arg	Leu	Gln	Glu	Glu
			260					265					270		
Leu	Ala	Ala	Ser	Asp	Arg	Ala	Arg	Arg	Gln	Ala	Gln	Gln	Asp	Arg	Asp
		275					280					285			
Glu	Met	Ala	Asp	Glu	Val	Ala	Asn	Gly	Asn	Leu	Ser	Lys	Ala	Ala	Ile
290						295					300				
Leu	Glu	Glu	Lys	Arg	Gln	Leu	Glu	Gly	Arg	Leu	Gly	Gln	Leu	Glu	Glu
305					310					315				320	
Glu	Leu	Glu	Glu	Glu	Gln	Thr	Xaa	Ser	Glu	Leu	Leu	Asn	Asp	Arg	Tyr
			325					330					335		
Arg	Lys	Leu	Leu	Leu	Gln	Val	Glu	Ser	Leu	Thr	Thr	Glu	Leu	Ser	Ala
			340					345					350		
Glu	Arg	Ser	Phe	Ser	Ala	Lys	Ala	Glu	Ser	Gly	Arg	Gln	Gln	Leu	Glu

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      355              360              365
Arg Gln Ile Gln Glu Leu Arg Gly Arg Leu Gly Glu Glu Asp Ala Gly
  370              375              380
Ala Arg Ala Arg His Lys Met Thr Ile Ala Ala Leu Glu Ser Lys Leu
385              390              395              400
Ala Gln Ala Glu Glu Gln Leu Glu Gln Glu Thr Arg Glu Arg Ile Leu
      405              410              415
Ser Gly Lys Leu Val Pro Lys Ser Lys Lys Arg Phe Lys Glu Val Val
      420              425              430
Leu Gln Val Glu Glu Glu Arg Arg Val Ala Asp Gln Leu Arg Asp Gln
      435              440              445
Leu Glu Lys Gly Asn Leu Arg Val Lys Gln Leu Lys Arg Gln Leu Glu
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<210> 1967

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1967

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120
tgcattcacat ctgcgggcca gtcagctccc ctgggcttgc actcgtcggc gatgctggcc
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240
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300
gttatcatcg ataccaccgg cattctcttg ggtggcatga acgcctcatc tctagatatg
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401

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<210> 1968

<211> 94

<212> PRT

<213> Homo sapiens

<400> 1968

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Gly Asp Ala Gly Leu Ala Pro Asp Pro Leu Trp Gly Val Gly Cys Gly
      20              25              30
Trp Ala Phe Gln Ser Ala Ala Trp Leu Val Asp Cys Thr Gly Ser His
      35              40              45
Leu Ala Asp Arg Thr Ala Leu Asp Arg Ala Leu Arg Ser Tyr His Arg
      50              55              60
Tyr His Arg His Ser Leu Gly Trp His Glu Arg Leu Ile Ser Arg Tyr
      65              70              75              80
Ala Asn Gly Arg Gly Phe His Ala Leu Glu Lys Leu Met Leu

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85

90

<210> 1969
 <211> 464
 <212> DNA
 <213> Homo sapiens

<400> 1969
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 120
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 180
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 240
 ggcgtcgccg gagtaggaga aatcgtctcg tctgacaacg ggcattctatt gcctgccgag
 300
 ttcaccgaca ccaggcatc tgacgcgtta gtgcagctgg cacgtctgtc tgaggacgag
 360
 taccagcagg tgtgtcaggc ctcccggcag gtgtgggaag aaaagttccg cgcctctgtc
 420
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 464

<210> 1970
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 1970
 Xaa Ile Asp Ala His Trp Thr His Leu Gly Asp Gly Pro Gln Met Asp
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 Thr Leu Arg Glu Glu Val Ala Val His Arg Val Thr Asp Ala Val Thr
 20 25 30
 Leu Leu Gly His Val Ala Asn Thr Gln Val Met Ala Thr Gln Arg Asp
 35 40 45
 Leu Lys Pro Ser Val Phe Val Asn Leu Ser Ser Ser Glu Gly Leu Pro
 50 55 60
 Val Ser Met Met Glu Val Ala Ser Leu Gly Ile Pro Ile Ile Ala Thr
 65 70 75 80
 Gly Val Gly Gly Val Gly Glu Ile Val Ser Ser Asp Asn Gly His Leu
 85 90 95
 Leu Pro Ala Glu Phe Thr Asp Thr Gln Ala Ser Asp Ala Leu Val Gln
 100 105 110
 Leu Ala Arg Leu Ser Glu Asp Glu Tyr Gln Gln Val Cys Gln Ala Ser
 115 120 125
 Arg Gln Val Trp Glu Glu Lys Phe Arg Ala Ser Val Val Tyr Pro Glu
 130 135 140
 Phe Cys Arg Glu Cys Trp Gly Asp Ala Asp
 145 150

<210> 1971
 <211> 520

<212> DNA

<213> Homo sapiens

<400> 1971

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120
acagacgacg acaaaaacaa ttagagcatc agttgatata atacaaatgg aatataatgc
180
atctaacatt tcaaattcaa gacatgattc tgatgaaatc agtggtaaaa tgaatacata
240
tatgaattct acgacttcta agaaggatac tgggtgtgcaa acagatgact taaatatagg
300
aatattcacc aatgcagaat cacattgtgg atcattaatg gagagggaca tcacaaattg
360
ttcatctcct gagatttcgg cagaacttat tggacagttt agcaccaaga aaaacaagca
420
agaactaact caggataaag gagccagctt agaaaaagaa aacaatcggg gtaatgacca
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<210> 1972

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1972

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Met Glu Tyr Asn Ala Ser Asn Ile Ser Asn Ser Arg His Asp Ser Asp
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Glu Ile Ser Gly Lys Met Asn Thr Tyr Met Asn Ser Thr Thr Ser Lys
20           25           30
Lys Asp Thr Gly Val Gln Thr Asp Asp Leu Asn Ile Gly Ile Phe Thr
35           40           45
Asn Ala Glu Ser His Cys Gly Ser Leu Met Glu Arg Asp Ile Thr Asn
50           55           60
Cys Ser Ser Pro Glu Ile Ser Ala Glu Leu Ile Gly Gln Phe Ser Thr
65           70           75           80
Lys Lys Asn Lys Gln Glu Leu Thr Gln Asp Lys Gly Ala Ser Leu Glu
85           90           95
Lys Glu Asn Asn Arg Cys Asn Asp Gln Cys Asn Gln Phe Thr Arg Ile
100          105          110
Glu Lys Gln Thr Lys Gln
115

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<210> 1973

<211> 331

<212> DNA

<213> Homo sapiens

<400> 1973

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 gagctacaag cgatgaacag cgatactcgc ttcaccacga gcgtgggaat cgacctatcc
 180
 cccgctcgat ctttctccgc ttggggcgctg cgcggaacga ctttttctgc gccgtcgatg
 240
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 331

<210> 1974

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1974

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Gln	Lys	Lys	Ser	Asp	Gly	Leu	Gly	Ser	Phe	Phe	Val	Ala	Thr	Thr	Leu
			20					25					30		
Glu	Glu	Leu	Gln	Ala	Met	Asn	Ser	Asp	Thr	Arg	Phe	Thr	Thr	Ser	Val
		35					40					45			
Gly	Ile	Asp	Leu	Ser	Pro	Ala	Arg	Ser	Phe	Ser	Ala	Trp	Ala	Leu	Arg
	50					55				60					
Gly	Thr	Thr	Phe	Ser	Ala	Pro	Ser	Met	Thr	Lys	Ala	Ser	Arg	Ser	Ser
65				70					75				80		
Ser	Ala	Ala	Pro	Ser	Ala	Pro	Arg	Arg	Cys	Gly	Lys	Ser	Trp	Arg	Ser
			85					90					95		
Pro	Pro	Val	Lys	Ser	Cys	Ala									
			100												

<210> 1975

<211> 370

<212> DNA

<213> Homo sapiens

<400> 1975

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 120
 agaaggcggg tgccgacacg gcgagccgctc agcaggagat ttgcgatgctg ctggcgacaga
 180
 ctgcgcgcga catctcttcg caaacacagg cccacgccaa caacacgac gccgagattt
 240
 ctcgactggt gcaggccgcc tcggaggcgc caaaggctgc tgccgaagtg gttgccgagc
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 370

<210> 1976

<211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1976
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 20 25 30
 Arg Leu Arg Gly Gly Leu His Gln Ser Arg Asn Leu Gly Asp Arg Val
 35 40 45
 Val Gly Val Gly Leu Cys Leu Arg Arg Asp Val Ala Arg Ser Leu Arg
 50 55 60
 Gln Arg Ile Ala Asn Leu Leu Thr Ala Arg Arg Val Gly Thr Arg
 65 70 75 80
 Leu Leu Pro Arg Leu Ala Gln Leu Gly Ala His Cys Thr Gln Arg Ile
 85 90 95
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 100 105 110
 Gln Leu His Glu Arg Leu Ala Arg Arg
 115 120

<210> 1977
 <211> 551
 <212> DNA
 <213> Homo sapiens

<400> 1977
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 120
 agagaggaga caggcagcca ggctgttaca caggaggagg cacaggaggt gcacggggagg
 180
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 240
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 300
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 360
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 420
 gttaaaatgg cctgatccaa agctggaggg ggggtggagt gactggtgac tgctcttccc
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 540
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 551

<210> 1978
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 1978

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Met His Pro Trp His Pro Thr Ser Ser Gly Ile Cys Leu Leu Val Ser
 1           5           10           15
Val Val Ala Pro Phe Ser Ser Ser Thr Ser Leu Met Phe Gln Leu Glu
          20           25           30
Pro Leu Pro Ala Val Ser Pro Thr Ser Phe Ile Pro Pro Val Thr Arg
          35           40           45
Glu Val Gln Ile Phe Gln Pro Gly His Cys Leu Pro Ser Arg Leu Ala
 50           55           60
Pro Pro Val His Leu Leu Cys Ser Ser Leu Cys Asn Ser Leu Ala Ala
65           70           75           80
Cys Leu Leu Ser Pro Leu Thr Gln Leu Leu Thr Cys Pro Thr Pro Ala
          85           90           95
Gln Pro Thr Ser Ser
          100

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<210> 1979

<211> 5530

<212> DNA

<213> Homo sapiens

<400> 1979

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120
actatgctgc tcgggtgggc gtccctgctg ctgtgcgcgt tccgcctgcc cctggccgcg
180
gtcggccccg ccgcgacacc tgcccaggat aaagccgggc agcctccgac tgetgcagca
240
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300
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540
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900
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960

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<210> 1980

<211> 929

<212> PRT

<213> Homo sapiens

<400> 1980

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Gln Pro Pro Thr Ala Ala Ala Ala Gln Pro Arg Arg Arg Gln Gly			
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Glu Glu Val Gln Glu Arg Ala Glu Pro Pro Gly His Pro His Pro Leu			
	50	55	60
Ala Gln Arg Arg Arg Ser Lys Gly Leu Val Gln Asn Ile Asp Gln Leu			
65	70	75	80
Tyr Ser Gly Gly Gly Lys Val Gly Tyr Leu Val Tyr Ala Gly Gly Arg			
	85	90	95
Arg Phe Leu Leu Asp Leu Glu Arg Asp Gly Ser Val Gly Ile Ala Gly			
	100	105	110
Phe Val Pro Ala Gly Gly Gly Thr Ser Ala Pro Trp Arg His Arg Ser			
	115	120	125
His Cys Phe Tyr Arg Gly Thr Val Asp Ala Ser Pro Arg Ser Leu Ala			
	130	135	140
Val Phe Asp Leu Cys Gly Gly Leu Asp Gly Phe Phe Ala Val Lys His			
145	150	155	160
Ala Arg Tyr Thr Leu Lys Pro Leu Leu Arg Gly Pro Trp Ala Glu Glu			
	165	170	175
Glu Lys Gly Arg Val Tyr Gly Asp Gly Ser Ala Arg Ile Leu His Val			
	180	185	190
Tyr Thr Arg Arg Ala Ser Ala Ser Arg Pro Cys Arg Arg Ala Pro Ala			
	195	200	205
Ala Lys Pro Pro Arg Pro His Arg Arg Pro Thr Ser Met Leu Arg Arg			
	210	215	220
Thr Ala Thr Arg Ala Asp Ala Gln His Ala Ser Gln Leu Leu Asp Gln			
225	230	235	240
Ser Ala Leu Ser Pro Ala Gly Gly Ser Gly Pro Gln Thr Trp Trp Arg			
	245	250	255
Arg Arg Arg Arg Ser Ile Ser Arg Ala Arg Gln Val Glu Leu Leu Leu			
	260	265	270
Val Ala Asp Ala Ser Met Ala Arg Leu Tyr Gly Arg Gly Leu Gln His			
	275	280	285
Tyr Leu Leu Thr Leu Ala Ser Ile Ala Asn Arg Leu Tyr Ser His Ala			
	290	295	300
Ser Ile Glu Asn His Ile Arg Leu Ala Val Val Lys Val Val Val Leu			
305	310	315	320
Gly Asp Lys Asp Lys Ser Leu Glu Val Ser Lys Asn Ala Ala Thr Thr			
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Leu Lys Asn Phe Cys Lys Trp Gln His Gln His Asn Gln Leu Gly Asp			
	340	345	350
Asp His Glu Glu His Tyr Asp Ala Ala Ile Leu Phe Thr Arg Glu Asp			
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Leu Cys Gly His His Ser Cys Asp Thr Leu Gly Met Ala Asp Val Gly			
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Thr Ile Cys Ser Pro Glu Arg Ser Cys Ala Val Ile Glu Asp Asp Gly			
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Leu His Ala Ala Phe Thr Val Ala His Glu Ile Gly His Leu Leu Gly			
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Leu Ser His Asp Asp Ser Lys Phe Cys Glu Glu Thr Phe Gly Ser Thr			
	420	425	430
Glu Asp Lys Arg Leu Met Ser Ser Ile Leu Thr Ser Ile Asp Ala Ser			

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Asn	Leu	Thr	Phe	Gly	Pro	Glu	Tyr	Ser	Val	Cys	Pro	Gly	Met	Asp	Val
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Cys	Ala	Arg	Leu	Trp	Cys	Ala	Val	Val	Arg	Gln	Gly	Gln	Met	Val	Cys
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Leu	Thr	Lys	Lys	Leu	Pro	Ala	Val	Glu	Gly	Thr	Pro	Cys	Gly	Lys	Gly
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Arg	Ile	Cys	Leu	Gln	Gly	Lys	Cys	Val	Asp	Lys	Thr	Lys	Lys	Lys	Tyr
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Tyr	Ser	Thr	Ser	Ser	His	Gly	Asn	Trp	Gly	Ser	Trp	Gly	Ser	Trp	Gly
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Gln	Cys	Ser	Arg	Ser	Cys	Gly	Gly	Gly	Val	Gln	Phe	Ala	Tyr	Arg	His
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Cys	Asn	Asn	Pro	Ala	Pro	Arg	Asn	Asn	Gly	Arg	Tyr	Cys	Thr	Gly	Lys
595				600				605							
Arg	Ala	Ile	Tyr	His	Ser	Cys	Ser	Leu	Met	Pro	Cys	Pro	Pro	Asn	Gly
610				615				620							
Lys	Ser	Phe	Arg	His	Glu	Gln	Cys	Glu	Ala	Lys	Asn	Gly	Tyr	Gln	Ser
625				630				635				640			
Asp	Ala	Lys	Gly	Val	Lys	Thr	Phe	Val	Glu	Trp	Val	Pro	Lys	Tyr	Ala
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Gly	Val	Leu	Pro	Ala	Asp	Val	Cys	Lys	Leu	Thr	Cys	Arg	Ala	Lys	Gly
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Thr	Gly	Tyr	Tyr	Val	Val	Phe	Ser	Pro	Lys	Val	Thr	Asp	Gly	Thr	Glu
675				680				685							
Cys	Arg	Pro	Tyr	Ser	Asn	Ser	Val	Cys	Val	Arg	Gly	Lys	Cys	Val	Arg
690				695				700							
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Phe	Asn	Lys	Lys	Ser	Lys	Gly	Tyr	Thr	Asp	Val	Val	Arg	Ile	Pro	Glu
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Arg	Phe	Thr	Ala	Tyr	Leu	Ala	Leu	Lys	Lys	Lys	Asn	Gly	Glu	Tyr	Leu
770				775				780							
Ile	Asn	Gly	Lys	Tyr	Met	Ile	Ser	Thr	Ser	Glu	Thr	Ile	Ile	Asp	Ile
785				790				795				800			
Asn	Gly	Thr	Val	Met	Asn	Tyr	Ser	Gly	Trp	Ser	His	Arg	Asp	Asp	Phe
805				810				815							
Leu	His	Gly	Met	Gly	Tyr	Ser	Ala	Thr	Lys	Glu	Ile	Leu	Ile	Val	Gln
820				825				830							
Ile	Leu	Ala	Thr	Asp	Pro	Thr	Lys	Pro	Leu	Asp	Val	Arg	Tyr	Ser	Phe
835				840				845							
Phe	Val	Pro	Lys	Lys	Ser	Thr	Pro	Lys	Val	Asn	Ser	Val	Thr	Ser	His
850				855				860							
Gly	Ser	Asn	Lys	Val	Gly	Ser	His	Thr	Ser	Gln	Pro	Gln	Trp	Val	Thr

865 870 875 880
 Gly Pro Trp Leu Ala Cys Ser Arg Thr Cys Asp Thr Gly Trp His Thr
 885 890 895
 Arg Thr Val Gln Cys Gln Asp Gly Asn Arg Lys Leu Ala Lys Gly Cys
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<210> 1981
 <211> 327
 <212> DNA
 <213> Homo sapiens

<400> 1981
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<210> 1982
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 1982
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 35 40 45
 Ser Pro Pro Lys Ala Ala Gly Gly Gly Arg Cys Pro Gly Pro Cys Arg
 50 55 60
 Ile Met Ala Trp Pro Gly Gln Arg Ala Ser Ser Ser Gly Arg Gly Arg
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<210> 1983
 <211> 383
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 <213> Homo sapiens

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<210> 1984

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1984

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			20					25				30			
Ala	Gln	Pro	Glu	Glu	Arg	Asn	Val	Pro	Lys	Arg	Asp	Ala	Ser	Val	Phe
		35					40				45				
Phe	Ile	Asp	Ile	Ile	Gly	Ser	Thr	Lys	Leu	Ser	Leu	Glu	Tyr	Asp	Ser
	50					55					60				
Tyr	Thr	Val	Val	Asp	Leu	Leu	Asn	Arg	Phe	Tyr	Thr	Ile	Val	Val	Glu
65				70					75					80	
Glu	Val	Asn	Arg	Ala	Gly	Gly	Val	Val	Asn	Lys	Phe	Ala	Gly	Asp	Ala
			85					90					95		
Val	Leu	Ala	Ile	Phe	Asn	Val	Pro	His	Asp	His	Pro	Asp	Pro	Ala	Gly
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<210> 1985

<211> 381

<212> DNA

<213> Homo sapiens

<400> 1985

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 240

cagaaccgaa gaaatatttt gcatgcgaaa ctcaattgag ccttcagtac ggccaaccaa
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<210> 1986
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 1986
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 35 40 45
 Leu Asp Arg Ile Lys Gly Tyr Lys Ala Cys Glu Pro Met Trp Gly Pro
 50 55 60
 Gly Gly Arg Pro Thr Thr Phe Ala Arg Pro Phe Ala Asp Thr Arg Val
 65 70 75 80
 Phe Glu Ser Asp Glu Thr Ala Gln Thr Ala Asp Glu Gln Thr Leu Ile
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<210> 1987
 <211> 419
 <212> DNA
 <213> Homo sapiens

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<210> 1988
 <211> 139
 <212> PRT

<213> Homo sapiens

<400> 1988

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 35 40 45
 Thr Pro Asp Lys Gln Ala Leu Glu Val Pro Gln Tyr Phe Trp Met Arg
 50 55 60
 Val Ala Met Gly Leu Ser Leu Thr Glu Asp Asp Pro Thr Ser Ser Ala
 65 70 75 80
 Xaa Cys Leu Tyr Asp Ser Met Ser Asn Leu Arg His Leu Ala Ala Gly
 85 90 95
 Ser Thr Leu Val Asn Ala Gly Thr His Xaa Ala Gln Leu Ser Asn Cys
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 115 120 125
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 130 135

<210> 1989

<211> 10795

<212> DNA

<213> Homo sapiens

<400> 1989

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 360
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Asp Asp Phe Met Ala Gln Thr Thr Lys Glu Thr Leu Ala Thr Gly
          675          680          685
His Phe Met Ser Val Ile Asn Ile Leu Met Gln Leu Arg Lys Val Cys
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 Leu Cys Val Ser Glu Ser Asn Gly Leu Glu Leu Pro Pro Ser Ala Ala
 2385 2390 2395 2400
 Ser Asp Glu Pro Leu Gln Glu Pro Leu Glu Ala Asp Arg Thr Ser Glu
 2405 2410 2415
 Glu Leu Thr Glu Ala Lys Thr Pro Thr Ser Ser Pro Glu Lys Pro Gln
 2420 2425 2430
 Glu Leu Val Thr Ala Glu Val Ala Pro Ser Thr Ser Ser Ser Ala
 2435 2440 2445
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2450 2455 2460
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 2465 2470 2475 2480
 Gln Pro Pro Gly Pro Lys Val Leu Arg Lys Leu Pro Gly Arg Leu Val
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 Thr Val Val Glu Glu Lys Glu Leu Val Arg Arg Arg Arg Gln Gln Arg
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 2515 2520 2525
 Pro Gly Ser Pro Ser Val Arg Ser Met Ser Gly Pro Glu Ser Ser Pro
 2530 2535 2540
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 Pro Pro Gln Gln Pro Phe Ile Ala Arg Arg His Ile Glu Leu Gly Val
 2565 2570 2575
 Thr Gly Gly Gly Ser Pro Glu Asn Gly Asp Gly Ala Leu Leu Ala Ile
 2580 2585 2590
 Thr Pro Pro Ala Val Lys Arg Arg Arg Gly Arg Pro Pro Lys Lys Asn
 2595 2600 2605
 Arg Ser Pro Ala Asp Ala Gly Arg Gly Val Asp Glu Ala Pro Ser Ser
 2610 2615 2620
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 2625 2630 2635 2640
 Thr Leu Ile Val Ala Asp Pro Val Leu Glu Pro Gln Leu Ile Pro Gly
 2645 2650 2655
 Pro Gln Pro Leu Gly Pro Gln Pro Val His Arg Pro Asn Pro Leu Leu
 2660 2665 2670
 Ser Pro Val Glu Lys Arg Arg Arg Gly Arg Pro Pro Lys Ala Arg Asp
 2675 2680 2685
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 2690 2695 2700
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 2725 2730 2735
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 2740 2745 2750
 Lys Asn Pro Pro Ser Pro Arg Pro Ser Gln Leu Pro Val Leu Asp Arg
 2755 2760 2765
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 2770 2775 2780
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 2785 2790 2795 2800
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 Asp Asp Leu Asp Leu Ala Asp Ser Gly Pro Gly Gly Leu Glu Leu Thr
 2835 2840 2845
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 Pro Gly Ser Leu Val Pro Pro Leu Glu Thr Glu Lys Leu Pro Arg Lys
 2865 2870 2875 2880
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	2900				2905					2910					
Ser	Glu	Ala	Glu	Ala	Ser	Gly	Glu	Glu	Glu	Glu	Gly	Asp	Gly	Thr	Pro
	2915				2920					2925					
Arg	Arg	Arg	Pro	Gly	Pro	Arg	Arg	Leu	Val	Gly	Thr	Thr	Asn	Gln	Gly
	2930				2935					2940					
Asp	Gln	Arg	Ile	Leu	Arg	Ser	Ser	Ala	Pro	Pro	Ser	Leu	Ala	Gly	Pro
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<210> 1991
 <211> 3102
 <212> DNA
 <213> Homo sapiens

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<210> 1992

<211> 733

<212> PRT

<213> Homo sapiens

<400> 1992

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Gly	Pro	Arg	Leu	Leu	Pro	Pro	Glu	Cys	Arg	Ser	Val	Ala	Cys	Val	Gln
			20					25					30		
Ala	Leu	Lys	Gly	Ser	Lys	Lys	Leu	Val	Leu	Ser	Val	Tyr	Ser	Ala	Gly
		35					40					45			
Arg	Ile	Pro	Gly	Gly	Tyr	Val	Thr	Asn	His	Ile	Tyr	Thr	Trp	Val	Asp
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Pro	Gln	Gly	Arg	Ser	Ile	Ser	Pro	Pro	Ser	Gly	Leu	Pro	Gln	Pro	His
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Gly	Gly	Ala	Leu	Arg	Gln	Gln	Glu	Gly	Asp	Arg	Arg	Ser	Thr	Leu	His
			85						90					95	
Leu	Leu	Gln	Gly	Gly	Asp	Glu	Lys	Lys	Val	Asn	Leu	Val	Leu	Gly	Asp
		100						105					110		
Gly	Arg	Ser	Leu	Gly	Leu	Thr	Ile	Arg	Gly	Gly	Ala	Glu	Tyr	Gly	Leu
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Gly	Ile	Tyr	Ile	Thr	Gly	Val	Asp	Pro	Gly	Ser	Glu	Ala	Glu	Gly	Ser
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Gly	Leu	Lys	Val	Gly	Asp	Gln	Ile	Leu	Glu	Val	Asn	Gly	Arg	Ser	Phe
145					150					155				160	
Leu	Asn	Ile	Leu	His	Asp	Glu	Ala	Val	Arg	Leu	Leu	Lys	Ser	Ser	Arg
			165						170					175	
His	Leu	Ile	Leu	Thr	Val	Lys	Asp	Val	Gly	Arg	Leu	Pro	His	Ala	Arg
		180							185				190		
Thr	Thr	Val	Asp	Glu	Thr	Lys	Trp	Ile	Ala	Ser	Ser	Arg	Ile	Arg	Glu
		195					200					205			
Thr	Met	Ala	Asn	Ser	Ala	Gly	Phe	Leu	Gly	Asp	Leu	Thr	Thr	Glu	Gly
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Ile	Asn	Lys	Pro	Gly	Phe	Tyr	Lys	Gly	Pro	Ala	Gly	Ser	Gln	Val	Thr
225					230					235				240	
Leu	Ser	Ser	Leu	Gly	Asn	Gln	Thr	Arg	Val	Leu	Leu	Glu	Gln	Ala	
			245						250				255		
Arg	His	Leu	Leu	Asn	Glu	Gln	Glu	His	Thr	Thr	Met	Ala	Tyr	Tyr	Leu

1518

690		695		700
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<210> 1993
 <211> 957
 <212> DNA
 <213> Homo sapiens

<400> 1993
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<210> 1994
 <211> 224
 <212> PRT
 <213> Homo sapiens

<400> 1994
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<210> 1995
<211> 285
<212> DNA
<213> Homo sapiens
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<400> 1995
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actgtcctca tcatgtgtga cttggactgt ggaccagccc ctcgggctct gctctgctga
180
cctatattct ttgtctcttg ttcctgagaa gctgggagtt gagaccaggt aaggtgttgt
240
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285

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<210> 1996
<211> 59
<212> PRT
<213> Homo sapiens
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<400> 1996
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His His His Val Met Thr Leu Asn Thr Val Leu Ile Met Cys Asp Leu

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<210> 1997
 <211> 313
 <212> DNA
 <213> Homo sapiens

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<210> 1998
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1998
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 35 40 45
 Gly Leu Phe Gly Pro Gly Thr Gly Ser Phe Leu Met Phe Leu Phe Val
 50 55 60
 Arg Phe Leu Arg Phe Asp Phe Leu His Ala Ser Ala Ala Ala Lys Val
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<210> 1999
 <211> 399
 <212> DNA
 <213> Homo sapiens

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<210> 2000

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2000

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Asp	His	Val	Ile	Met	Ser	Val	Lys	Ser	Lys	Thr	Met	Val	Gly	Gln	Leu
		20					25					30			
Val	Asp	Tyr	Gly	Arg	Ile	Thr	Phe	Val	Asp	Met	Thr	Gly	Ser	Ile	Thr
		35				40					45				
Gln	Gly	Gln	Asn	Asp	Ala	Ala	Gln	Val	Val	Gly	Thr	Asn	Val	Lys	Leu
	50				55					60					
Asn	Ser	Gln	Ala	Val	Asp	Ala	Phe	Ala	Gly	Phe	Tyr	Gln	Ala	Gly	Lys
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Pro	Met	Asp	Asp	Ile	Asp	Ser	Ser	Leu	Lys	Leu					
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<210> 2001

<211> 1434

<212> DNA

<213> Homo sapiens

<400> 2001

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<210> 2002

<211> 79

<212> PRT

<213> Homo sapiens

<400> 2002

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Arg	Arg	Asp	Lys	Phe	Gly	Arg	Thr	Pro	Leu	His	Tyr	Ala	Ala	Ala	Asn
			20					25					30		
Gly	Ser	Tyr	Gln	Cys	Ala	Val	Thr	Leu	Val	Thr	Ala	Gly	Ala	Gly	Val
		35					40					45			
Asn	Glu	Ala	Asp	Cys	Lys	Gly	Cys	Ser	Pro	Leu	His	Tyr	Ala	Ala	Ala
		50				55					60				
Ser	Asp	Thr	Tyr	Arg	Xaa	Ser	Gly	Thr	Pro	Tyr	Thr	Phe	Gln	Pro	
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<210> 2003

<211> 688

<212> DNA

<213> Homo sapiens

<400> 2003

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 480
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 688

<210> 2004

<211> 172

<212> PRT

<213> Homo sapiens

<400> 2004

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Phe	Ser	Asp	Val	Ile	Ala	Asp	Thr	Ile	Lys	Glu	Leu	Gln	Asp	Ser	Ala
			20					25					30		
Thr	Tyr	Asn	Ser	Leu	Leu	Gln	Ala	Leu	Ser	Lys	Glu	Arg	Glu	Asn	Lys
		35					40					45			
Met	His	Phe	Tyr	Asp	Ile	Ile	Ser	Arg	Glu	Glu	Lys	Gly	Arg	Lys	Gln
	50					55					60				
Ile	Ile	Ser	Leu	Gln	Lys	Gln	Leu	Ile	Asn	Phe	Lys	Lys	Glu	Trp	Gln
65				70					75					80	
Phe	Glu	Val	Gln	Ser	Gln	Asn	Glu	Tyr	Ile	Ala	Asn	Leu	Lys	Asp	Gln
			85					90					95		
Leu	Gln	Glu	Met	Lys	Ala	Lys	Ser	Asn	Leu	Glu	Asn	Arg	Tyr	Met	Lys
		100					105					110			
Thr	Asn	Thr	Glu	Leu	Gln	Ile	Ala	Gln	Thr	Gln	Lys	Lys	Cys	Asn	Arg
	115					120						125			
Thr	Glu	Glu	Leu	Leu	Val	Glu	Glu	Ile	Glu	Lys	Leu	Arg	Met	Lys	Thr
	130				135					140					
Glu	Glu	Glu	Ala	Arg	Thr	His	Thr	Glu	Ile	Glu	Met	Phe	Leu	Arg	Lys
145				150					155					160	
Glu	Gln	Gln	Val	Gly	Pro	His	Ser	Phe	Ser	Met	Leu				
			165						170						

<210> 2005
 <211> 354
 <212> DNA
 <213> Homo sapiens

<400> 2005
 gctagcacca agccaagggt atgtttcctt gcttgcatgt ggggtttctg gccagtcagc
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 caagtgaact gattgacccc cagccctgtg gggaatttca ggggggtatt gtcttgggtca
 120
 tcggagtcag ggggtggcctt tnagccaagg ctgcattaac ttttgggaaa agaaatggga
 180
 agcccgcggt gtcacagggt ctccctgaccg gctgggtagg gtttggcctt atcttacagc
 240
 cagtgtgtgt tttgtcaga tggacgcaca tggaaaccag gctaggatca tcttcccaat
 300
 gtctactccc tgctttggtc tgtcctgaaa acaattgcaa agacattgtg gctg
 354

<210> 2006
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 2006
 Met Phe Pro Cys Leu His Val Gly Phe Leu Ala Ser Gln Pro Ser Glu
 1 5 10 15
 Leu Ile Asp Pro Gln Pro Cys Gly Glu Phe Gln Gly Gly Ile Val Leu
 20 25 30
 Val Ile Gly Val Arg Gly Gly Leu Xaa Ala Lys Ala Ala Leu Thr Phe
 35 40 45
 Gly Lys Arg Asn Gly Lys Pro Ala Val Ser Gln Gly Leu Leu Thr Gly
 50 55 60
 Trp Val Gly Phe Gly Leu Ile Leu Gln Pro Val Leu Cys Leu Leu Arg
 65 70 75 80
 Trp Thr His Met Glu Thr Arg Leu Gly Ser Ser Ser Gln Cys Leu Leu
 85 90 95
 Pro Ala Leu Val Cys Pro Glu Asn Asn Cys Lys Asp Ile Val Ala
 100 105 110

<210> 2007
 <211> 335
 <212> DNA
 <213> Homo sapiens

<400> 2007
 nnacgcgtgc catgtgcatg tgtatatgca tgtatgtgcg tatgtgtgtg catgtgtgtg
 60
 tgtatatgca tgtgtgtatg tgcattgtacg tgnngtgca tatgcgtgtg catgcattgtg
 120
 tgtgcgtatg tgtgcatann catgtgcaca catgtacaca cgtgtacatg ttcattgtatg
 180
 tgcacgtgca tatgtgtaca cgtgtatgcg tgtacatgta tgagcatatg tacacgtgtg
 240

gatgtgtgtg tatgcatgtg tgtgtgcaca gatatgcctt ttcctttcat acaggctggg
 300
 ttgagtattg ctggtaggca gggacaactt tccgt
 335

<210> 2008
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 2008
 Xaa Arg Val Pro Cys Ala Cys Val Tyr Ala Cys Met Cys Val Cys Val
 1 5 10 15
 Cys Met Cys Val Cys Ile Cys Met Cys Val Cys Ala Cys Thr Cys Xaa
 20 25 30
 Cys Ile Cys Val Cys Met His Ala Cys Ala Tyr Val Cys Ile Xaa Met
 35 40 45
 Cys Thr His Val His Thr Cys Thr Cys Ser Cys Met Cys Thr Cys Ile
 50 55 60
 Cys Val His Val Tyr Ala Cys Thr Cys Met Ser Ile Cys Thr Arg Val
 65 70 75 80
 Asp Val Cys Val Cys Met Cys Val Cys Thr Asp Met Pro Phe Pro Phe
 85 90 95
 Ile Gln Ala Gly Leu Ser Ile Ala Gly Arg Gln Gly Gln Leu Ser
 100 105 110

<210> 2009
 <211> 288
 <212> DNA
 <213> Homo sapiens

<400> 2009
 gacatcaccc cgtgctggc caaccccaac ggtttctccg cagcgatcga ggaactggg
 60
 ctgcgttccc cagcgacat cgacgtggc gtcggcatgg aggctcgcg cttcctcttc
 120
 gcagctccgg tcgccctggc catcggggca ggattcgtgc cggtgcgcaa gccggggaag
 180
 ctccccggcc aggtgtattc cgagaccttt gccatggagt acggggagga gaccctcacc
 240
 gtccaccagt acgccatcaa gccgggggtc cgcgtcatca tcgtcgac
 288

<210> 2010
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 2010
 Asp Ile Thr Pro Leu Leu Ala Asn Pro Asn Gly Phe Ser Ala Ala Ile
 1 5 10 15
 Glu Glu Leu Val Leu Arg Ser Pro Arg Asp Ile Asp Val Val Val Gly
 20 25 30
 Met Glu Ala Arg Gly Phe Leu Phe Ala Ala Pro Val Ala Leu Ala Ile

```

      35          40          45
Gly Ala Gly Phe Val Pro Val Arg Lys Pro Gly Lys Leu Pro Gly Gln
  50          55          60
Val Tyr Ser Glu Thr Phe Ala Met Glu Tyr Gly Glu Glu Thr Leu Thr
  65          70          75          80
Val His Gln Tyr Ala Ile Lys Pro Gly Ser Arg Val Ile Ile Val Asp
      85          90          95

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<210> 2011
 <211> 384
 <212> DNA
 <213> Homo sapiens

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<400> 2011
ctcgagcagt ctctgcatgt taacaccccc gtacggcccg taaagcataa ccgtctccga
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cttgccgccg cctgctgct tgcctagcgc gccggtgaac ccacctgagg gccggatgta
120
gaagtcaacg gtggacgacg ggttggaggg tttgttgatt ggcgagtggg gaagcgagca
180
gattgtaaat tggtagaacg gggaacagag attagtcaca atgacgagaa cgacaacaga
240
atgttgattg ttatagccat ctctggagga gagggaaaaa gccaggtatc tagacagcga
300
aagcaaagt gagccgaggg gacagtgccg tccttcgttc ctcggaact cccacgaggc
360
accttccatt ctgtgggcag aatt
384

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<210> 2012
 <211> 123
 <212> PRT
 <213> Homo sapiens

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<400> 2012
Met Glu Gly Ala Ser Trp Glu Leu Pro Arg Asn Glu Gly Arg His Cys
  1          5          10          15
Pro Leu Gly Ser His Leu Leu Ser Leu Ser Arg Tyr Leu Ala Phe Ser
  20          25          30
Leu Ser Ser Arg Asp Gly Tyr Asn Asn Gln His Ser Val Val Val Leu
  35          40          45
Val Ile Val Thr Asn Leu Cys Ser Pro Phe Tyr Gln Phe Thr Ile Cys
  50          55          60
Ser Leu Pro His Ser Pro Ile Asn Lys Pro Ser Asn Pro Ser Ser Thr
  65          70          75          80
Val Asp Phe Tyr Ile Arg Pro Ser Gly Gly Phe Thr Gly Arg Leu Ala
  85          90          95
Lys His Ala Gly Gly Gly Lys Ser Glu Thr Val Met Leu Tyr Gly Pro
  100          105          110
Tyr Gly Gly Val Asn Met Gln Arg Leu Leu Glu
  115          120

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<210> 2013
 <211> 309

<212> DNA

<213> Homo sapiens

<400> 2013

gcgtatcccc acggctacgg catgaccgeg cttatcggcc cggacctgtc caccgtcgaa
60
gccttgctcg cccagggtcca cagcacacaa accccgggtg acctggccaa tatcaatgcc
120
gataaccaga cggttatcgc gggcagcgac ggggcaatga aagcagtcgc caatctggtc
180
cgcggaacg gcgtcgccaa acgcttgccc gtcagcgtgc cgtcccattg tgcgtgctg
240
gaaaaacctg ccgaaacact ggcccaagcc ttcgctgaag tgacgtgaa aacgccgncn
300
nnnccnncn
309

<210> 2014

<211> 103

<212> PRT

<213> Homo sapiens

<400> 2014

Ala	Tyr	Pro	His	Gly	Tyr	Gly	Met	Thr	Ala	Leu	Ile	Gly	Pro	Asp	Leu
1				5					10					15	
Ser	Thr	Val	Glu	Ala	Leu	Leu	Ala	Gln	Val	His	Ser	Thr	Gln	Thr	Pro
		20						25					30		
Val	Tyr	Leu	Ala	Asn	Ile	Asn	Ala	Asp	Asn	Gln	Thr	Val	Ile	Ala	Gly
	35					40						45			
Ser	Asp	Gly	Ala	Met	Lys	Ala	Val	Ala	Asn	Leu	Val	Arg	Gly	Asn	Gly
	50					55					60				
Val	Ala	Lys	Arg	Leu	Ala	Val	Ser	Val	Pro	Ser	His	Cys	Ala	Leu	Leu
65				70					75					80	
Glu	Lys	Pro	Ala	Glu	Thr	Leu	Ala	Gln	Ala	Phe	Ala	Glu	Val	Thr	Leu
				85				90						95	
Lys	Thr	Pro	Xaa	Xaa	Pro	Xaa									
				100											

<210> 2015

<211> 329

<212> DNA

<213> Homo sapiens

<400> 2015

acgcgtgcca tgctcggtat ccgcgccac caccctgtct ttgggaccgg cgagttcacc
60
gatctaggcg ggccggacat ggcagtgatg tccttcctac gtcacaacga gcacgaaacg
120
gtcctgtgcc tggctaattct ctccgatact gagcggacgg ttgcccttca ccttcacaa
180
ttcgggggcg tggcgggctc ttctctcatc catggtcagg acgcgcaacc agtaaaagct
240
gacggaacac tgtccgtacc gttgtggcca tatggctatc gatggctgca gatgtccggc
300

gaggagaggt catgaccgct tgggaagac
329

<210> 2016
<211> 104
<212> PRT
<213> Homo sapiens

<400> 2016
Thr Arg Ala Met Leu Gly Ile Arg Arg His His Pro Val Phe Gly Thr
1 5 10 15
Gly Glu Phe Thr Asp Leu Gly Gly Pro Asp Met Ala Val Met Ser Phe
20 25 30
Leu Arg His Asn Glu His Glu Thr Val Leu Cys Leu Ala Asn Leu Ser
35 40 45
Asp Thr Glu Arg Thr Val Ala Leu His Leu Pro Gln Phe Ala Gly Val
50 55 60
Ala Gly Ser Ser Leu Ile His Gly Gln Asp Ala Gln Pro Val Lys Ala
65 70 75 80
Asp Gly Thr Leu Ser Val Pro Leu Trp Pro Tyr Gly Tyr Arg Trp Leu
85 90 95
Gln Met Ser Gly Glu Glu Arg Ser
100

<210> 2017
<211> 457
<212> DNA
<213> Homo sapiens

<400> 2017
accaaggtca gattcatggc ctcttttcct ccagcggcca gcaggaaacg cggggagccc
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ttgatcatct ccgacatcaa gaaaggcagc gtggcacaca ggacgggcac cctggagcca
120
ggcgacaagc tactggccat tgacaatata cgcttgga caactgccccat ggaggacgac
180
gtgcaaatcc tgcggcagtg cgaggacctg gtgaagctga agatccggaa ggacgaggac
240
aactctgatg agctggagac cacaggtgcc gtcagttaca cagtggagct gaagcgctac
300
gggggtcccc tgggcatcac catttcgggc acggaggaac cttttgacct cattttcatt
360
tcaggcctcc ccaaactgtg cctggctgag aggactggtg ccatccagtg ggggaaccgc
420
ttcggaccat aacaacgtta ttctcagga cggacca
457

<210> 2018
<211> 143
<212> PRT
<213> Homo sapiens

<400> 2018
Thr Lys Val Arg Phe Met Ala Ser Phe Pro Pro Ala Ala Ser Arg Lys

```

      1           5           10           15
Arg Gly Glu Pro Leu Ile Ile Ser Asp Ile Lys Lys Gly Ser Val Ala
      20           25           30
His Arg Thr Gly Thr Leu Glu Pro Gly Asp Lys Leu Leu Ala Ile Asp
      35           40           45
Asn Ile Arg Leu Asp Asn Cys Pro Met Glu Asp Ala Val Gln Ile Leu
      50           55           60
Arg Gln Cys Glu Asp Leu Val Lys Leu Lys Ile Arg Lys Asp Glu Asp
      65           70           75           80
Asn Ser Asp Glu Leu Glu Thr Thr Gly Ala Val Ser Tyr Thr Val Glu
      85           90           95
Leu Lys Arg Tyr Gly Gly Pro Leu Gly Ile Thr Ile Ser Gly Thr Glu
      100          105          110
Glu Pro Phe Asp Pro Ile Phe Ile Ser Gly Leu Pro Lys Arg Gly Leu
      115          120          125
Ala Glu Arg Thr Gly Ala Ile Gln Trp Gly Asn Arg Phe Gly Pro
      130          135          140

```

<210> 2019

<211> 483

<212> DNA

<213> Homo sapiens

<400> 2019

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cgcgctcggcg acgattttat cctcgggggtt cggtataccg ccgatgaatg tctcgagaac
60
ggcaccggca aggcggaagg catcgaaatc tccagacggc tgaaggagag cggcctgac
120
gactatctca acgtcatcag gggacatatc gacaccgatc ccggcctgac cgacgtcatc
180
cccattcagg gcatggcgag cgcgccgcat cttgatttcg caggcgaaat ccgcgcgggc
240
accagcttcc ccgtcttcca tgccgcaaaa attcaggatg tcgccaccgc ccggcatgcg
300
attgccgccc gcaaggtcga catgatcggc atgaccgcg cccacatgac cgatccgcat
360
atcgctccga agatcatgga aaaacaggag gaggacatcc gccctgcgt cggcgccaat
420
tattgtcttg atcgattta tcaaggcggc ctgccttct gcattcacia tgcggaacc
480
ggc
483

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<210> 2020

<211> 161

<212> PRT

<213> Homo sapiens

<400> 2020

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Arg Val Gly Asp Asp Phe Ile Leu Gly Val Arg Tyr Thr Ala Asp Glu
      1           5           10           15
Cys Leu Glu Asn Gly Thr Gly Lys Ala Glu Gly Ile Glu Ile Ser Arg
      20           25           30
Arg Leu Lys Glu Ser Gly Leu Ile Asp Tyr Leu Asn Val Ile Arg Gly

```

35	40	45
His Ile Asp Thr Asp Pro Gly Leu Thr Asp Val Ile Pro Ile Gln Gly		
50	55	60
Met Ala Ser Ala Pro His Leu Asp Phe Ala Gly Glu Ile Arg Ala Ala		
65	70	75
Thr Ser Phe Pro Val Phe His Ala Ala Lys Ile Gln Asp Val Ala Thr		
85	90	95
Ala Arg His Ala Ile Ala Ala Gly Lys Val Asp Met Ile Gly Met Thr		
100	105	110
Arg Ala His Met Thr Asp Pro His Ile Val Arg Lys Ile Met Glu Lys		
115	120	125
Gln Glu Glu Asp Ile Arg Pro Cys Val Gly Ala Asn Tyr Cys Leu Asp		
130	135	140
Arg Ile Tyr Gln Gly Gly Leu Ala Phe Cys Ile His Asn Ala Ala Thr		
145	150	155
Gly		160

<210> 2021

<211> 797

<212> DNA

<213> Homo sapiens

<400> 2021

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ngaattcggg cactggctta actcggagca cagcttcacc acgacccatg acaaggaagg
60
gtttctcctg agaagggcca gcaagtgtgt ttaaggacat cctccctcct gtcctgcag
120
ccctcctccc tcagtactcg cgagactacg aaaacacgtg ctgaaatgga caccgctcc
180
gggagccagt gttccgtcac ccagaagcc atactcaata atgaaaagct ggtcttgccg
240
ccccgatct ccagagtga cggctggctg ttaccctgc actacttcca ggtggtgacc
300
tgggtgtct tcgtgggctt ttctcggcc accttcggga tcttcattcc ctctctgct
360
cacgctgga aatacatgc ctatgtgga tccttttcat cgtggcatgg tctaagcggg
420
aggggttctt ggaggacct gcgatggacc tggctgtggg gtctgggcca tggctgcccg
480
gtggcaccag tcacctgtcc tgggcccagac tatgtcccc gagcctgcag gtgggcccag
540
tggcccctta tggttttggc cagccccggt taagggtcag gccaggccag cgttggtga
600
gggagttccg gagaggaat ctgtcaggag ggacagcagc cccctggcgt ggcgcaggac
660
ccgccctgct ggcagccttc cgctaaaatc cctgcgcagc attttgcaca tggccagccc
720
ctttctcctt gcccctggtg ccaaggagga acagcgccat gcccgcagg tcggcagcct
780
gcgtttccat gccaagc
797

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<210> 2022

<211> 135
 <212> PRT
 <213> Homo sapiens

<400> 2022

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Met Asp Thr Arg Ser Gly Ser Gln Cys Ser Val Thr Pro Glu Ala Ile
 1           5           10           15
Leu Asn Asn Glu Lys Leu Val Leu Pro Pro Arg Ile Ser Arg Val Asn
      20           25           30
Gly Trp Ser Leu Pro Leu His Tyr Phe Gln Val Val Thr Trp Ala Val
      35           40           45
Phe Val Gly Leu Ser Ser Ala Thr Phe Gly Ile Phe Ile Pro Phe Leu
      50           55           60
Pro His Ala Trp Lys Tyr Ile Ala Tyr Val Val Ser Phe Ser Ser Trp
      65           70           75           80
His Gly Leu Ser Gly Arg Gly Ser Trp Arg Thr Leu Arg Trp Thr Trp
      85           90           95
Leu Trp Gly Leu Gly His Gly Cys Pro Val Ala Pro Val Thr Cys Pro
      100          105          110
Gly Pro Asp Tyr Val Pro Arg Ala Cys Arg Trp Ala Gln Trp Pro Leu
      115          120          125
Met Val Leu Ala Ser Pro Gly
      130          135

```

<210> 2023
 <211> 462
 <212> DNA
 <213> Homo sapiens

<400> 2023

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naatctccga cgatccctgc cgacgtgctc gccggtgctc tcaagcaggc taaggaggct
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cgcaccgcga tccttgaggt gatgaacgag gccatcgatt ctcccgatga aatggccccg
120
actgctccgc gcattcattac cgtccacatc ccagtggaca agatcgggtga ggtcatcggc
180
cccaagggca agatgattaa ccagattcag gacgacactg gcgccaatat ctctattgag
240
gacgatggca cgattttcat cggggctgat aacggagatt cggccgagtc tgcccgttcg
300
atgatcaacg cgatcgctaa cccacagatg cccgaggtcg gtgagcggtta cctcggcacc
360
gtcgtcaaga cgacgagctt tggcgctttc gtctctctgc tgcccggcaa ggatggtctg
420
ttgcacatct ccaagatgcg tgaccttaac gacggtaaac gc
462

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<210> 2024
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 2024

```

Xaa Ser Pro Thr Ile Pro Ala Asp Val Leu Ala Gly Ala Leu Lys Gln

```



```

1           5           10           15
Ala Lys Glu Ala Arg Thr Ala Ile Leu Glu Val Met Asn Glu Ala Ile
20           25           30
Asp Ser Pro Asp Glu Met Ala Pro Thr Ala Pro Arg Ile Ile Thr Val
35           40           45
His Ile Pro Val Asp Lys Ile Gly Glu Val Ile Gly Pro Lys Gly Lys
50           55           60
Met Ile Asn Gln Ile Gln Asp Asp Thr Gly Ala Asn Ile Ser Ile Glu
65           70           75           80
Asp Asp Gly Thr Ile Phe Ile Gly Ala Asp Asn Gly Asp Ser Ala Glu
85           90           95
Ser Ala Arg Ser Met Ile Asn Ala Ile Ala Asn Pro Gln Met Pro Glu
100          105          110
Val Gly Glu Arg Tyr Leu Gly Thr Val Val Lys Thr Thr Ser Phe Gly
115          120          125
Ala Phe Val Ser Leu Leu Pro Gly Lys Asp Gly Leu Leu His Ile Ser
130          135          140
Lys Met Arg Asp Leu Asn Asp Gly Lys Arg
145          150

```

<210> 2025

<211> 872

<212> DNA

<213> Homo sapiens

<400> 2025

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cgtggtaacg atttacagga aagaacagct ggaactcgtg ctgggataac caggtacaag
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tgctctctgc agagaataag tgcacacagg ttggtgtctt ctgaccgaga gccctcctga
120
agggaggtct gtacctcttc cctcatctca ttttacacaa ggcgacaggt cagaggccag
180
ggtgggacga gagcgagga gcaactgtctc tggcagcagc acttgccact ccacaatgtg
240
gagaccagaa cggcacccca gagagcacgg gggaaatggc tcattcttaa aacaatggca
300
gaagaaatcc agccaaggtc acttttctctg tgtgagcatg ttaaggcca gagagtggct
360
acttctctgc ctctgcagc tccctcagtg tggcttgag gagttggcga agcttcaga
420
acacgtgga ggctgtctc cgggtgttcc cactggggac cccaggtct gcacattcct
480
gcaccgcctc ctgtaactgc agctgaagct ggaaagagac cgcagagctc ttgagaggcg
540
cggaacacca atggcgaaat attttgtcac agatgacctg caggttggtg tttacgcgct
600
gcgctccgca tttgttgact cgtaaatac atcttgaaa acagtcaaag aaattgcagt
660
cttcatctcc tgtgcagttt tgctcaagga tttccctcat ttaggttca aaaaaggcca
720
tgtccacatc aatagccacc actgtgaagt cgctccgat ggcaaagttt tccggttga
780
tgtcgagag gtggaggcgg tgggtacagt ccctgtcgaa atggttcccc atgtccaaga
840

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agctgagtgc gagggccctg atggccctgg cc
872

<210> 2026

<211> 157

<212> PRT

<213> Homo sapiens

<400> 2026

Met	Gly	Asn	His	Phe	Asp	Arg	Asp	Cys	Thr	His	Arg	Leu	His	Leu	Cys
1				5					10					15	
Asp	Ile	Lys	Pro	Glu	Asn	Phe	Ala	Ile	Arg	Ser	Asp	Phe	Thr	Val	Val
			20					25					30		
Ala	Ile	Asp	Val	Asp	Met	Ala	Phe	Phe	Glu	Pro	Lys	Met	Arg	Glu	Ile
		35					40					45			
Leu	Glu	Gln	Asn	Cys	Thr	Gly	Asp	Glu	Asp	Cys	Asn	Phe	Phe	Asp	Cys
	50					55					60				
Phe	Ser	Arg	Cys	Asp	Leu	Arg	Val	Asn	Lys	Cys	Gly	Ala	Gln	Arg	Val
65				70					75					80	
Asn	Asn	Asn	Leu	Gln	Val	Ile	Cys	Asp	Lys	Ile	Phe	Arg	His	Trp	Phe
			85						90					95	
Ser	Ala	Pro	Leu	Lys	Ser	Ser	Ala	Val	Ser	Phe	Gln	Leu	Gln	Leu	Gln
			100					105					110		
Leu	Gln	Glu	Ala	Val	Gln	Glu	Cys	Ala	Asp	Pro	Gly	Val	Pro	Ser	Gly
		115					120					125			
Asn	Thr	Arg	Arg	Ala	Ala	Ser	Ser	Val	Phe	Trp	Lys	Leu	Arg	Gln	Leu
	130					135					140				
Leu	Gln	Ala	Thr	Leu	Arg	Glu	Leu	Gln	Glu	Ala	Glu	Lys			
145					150						155				

<210> 2027

<211> 721

<212> DNA

<213> Homo sapiens

<400> 2027

tgtacaatga cagaccaagt ataaggcttt ggttgagaga ccagctttta aatattgaaa
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gacaaatata gtgtaaaagg cgcaatggaa tttgtatagt gaaggagatt ctctagtccc
120
agggttgtaa tgtcacttct gtctaattca ttacagaatt acagaatcaa atcatgttag
180
ccctagaaga aactgcagat cattttgttc aatcttctca ttatatagga aaggaaattt
240
gagggccagt gcaatggttt gccaaagtca cacaactagt tagtggaagg atccaggcat
300
tctaattcct ttctttcact aatacatttg gactgctcta cagaattact tctgtctgat
360
actatccact ttgaagagta gctagcatat agtagccatt tacttttggc tcaattaaaa
420
gcaaacattt ttgggacaaa atcaggcttt cctgattact tcttagataa cagagcccac
480
acagtattaa aacatgcagc ctttctttat gcaaaaagat tgaatatgga gccacttgaa
540

tcttaaactt cagtctgcag ctataaccaa tatcatcaga agttatacac aattggcaaa
 600
 agaatagctt attctgcca aatactgtc cagtcactag gatcatttca cttttttgaa
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 taccatttgc tttggggagg gaagtattgc cagaccgtga attcattatt acctctgatc
 720
 a
 721

<210> 2028

<211> 114

<212> PRT

<213> Homo sapiens

<400> 2028

Met	Asn	Ser	Arg	Ser	Gly	Asn	Thr	Ser	Leu	Pro	Lys	Ala	Asn	Gly	Ile
1				5					10					15	
Gln	Lys	Ser	Glu	Met	Ile	Leu	Val	Thr	Gly	Gln	Val	Phe	Gly	Gln	Asn
			20					25					30		
Lys	Leu	Phe	Phe	Cys	Gln	Leu	Cys	Ile	Thr	Ser	Asp	Asp	Ile	Gly	Tyr
		35				40					45				
Ser	Cys	Arg	Leu	Lys	Phe	Lys	Ile	Gln	Val	Ala	Pro	Tyr	Ser	Ile	Phe
	50					55					60				
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<210> 2029

<211> 8028

<212> DNA

<213> Homo sapiens

<400> 2029

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<210> 2030

<211> 794

<212> PRT

<213> Homo sapiens

<400> 2030

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 35 40 45
 Thr Thr Ala Gly Arg Val Val Ala Gly Gln Ile Phe Leu Asp Ser Glu
 50 55 60
 Glu Ser Glu Leu Glu Ser Ser Ile Gln Glu Glu Glu Asp Ser Leu Lys
 65 70 75 80
 Ser Gln Glu Gly Glu Ser Val Thr Glu Asp Ile Ser Phe Leu Glu Ser

1541

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Leu Phe Lys Asn Val Cys Glu Arg Gly Arg Trp Ser Glu Arg Leu Met		
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Thr Ala Tyr Asn Ser Tyr Lys Asp Gly Asp Tyr Asn Ala Ala Val Ile		
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Gln Tyr Leu Leu Leu Ala Glu Gln Gly Tyr Glu Val Ala Gln Ser Asn		
580	585	590
Ala Ala Phe Ile Leu Asp Gln Arg Glu Ala Ser Ile Val Gly Glu Asn		
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Glu Thr Tyr Pro Arg Ala Leu Leu His Trp Asn Arg Ala Ala Ser Gln		
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Gly Tyr Thr Val Ala Arg Ile Lys Leu Gly Asp Tyr His Phe Tyr Gly		
625	630	635
Phe Gly Thr Asp Val Asp Tyr Glu Thr Ala Phe Ile His Tyr Arg Leu		
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Ala Ser Glu Gln Gln His Ser Ala Gln Ala Met Phe Asn Leu Gly Tyr		
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Met His Glu Lys Gly Leu Gly Ile Lys Gln Asp Ile His Leu Ala Lys		
675	680	685
Arg Phe Tyr Asp Met Ala Ala Glu Ala Ser Pro Asp Ala Gln Val Pro		
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Val Phe Leu Ala Leu Cys Lys Leu Gly Val Val Tyr Phe Leu Gln Tyr		
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Ile Arg Glu Thr Asn Ile Arg Asp Met Phe Thr Gln Leu Asp Met Asp		
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Gln Leu Leu Gly Pro Glu Trp Asp Leu Tyr Leu Met Thr Ile Ile Ala		
740	745	750
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<210> 2031

<211> 662

<212> DNA

<213> Homo sapiens

<400> 2031

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<211> 195

<212> PRT

<213> Homo sapiens

<400> 2032

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Ile	Thr	Val	Arg	Asp	Val	Ala	Leu	Asn	Pro	Val	Pro	His	Leu	Asp	Thr	35	40	45	
His	Leu	Leu	Gly	Gly	Trp	Met	Lys	Pro	Ala	Glu	Gln	Arg	Ser	Ala	Ile	50	55	60	
Glu	Gln	Ala	Ser	Leu	Asp	Arg	Ser	Asn	Gln	Leu	Thr	Asp	Glu	Leu	Leu	65	70	75	80
Ala	Ala	Asp	Val	Leu	Val	Met	Ala	Ala	Pro	Met	Tyr	Asn	Phe	Ala	Ile	85	90	95	
Pro	Ser	Thr	Leu	Lys	Ala	Trp	Leu	Asp	His	Val	Leu	Arg	Ala	Gly	Val	100	105	110	
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Arg	Ala	Ile	Val	Leu	Thr	Ala	Arg	Gly	Gly	Ile	His	Thr	Gly	Ala	Ser	130	135	140	
Ser	Asp	His	Gln	Glu	Pro	Tyr	Leu	Arg	Gln	Val	Met	Ala	Phe	Ile	Gly	145	150	155	160
Ile	His	Asp	Val	Thr	Phe	Ile	His	Ala	Glu	Gly	Val	Asn	Leu	Ser	Gly	165	170	175	
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<210> 2033

<211> 380

<212> DNA

<213> Homo sapiens

<400> 2033

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<210> 2034

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2034

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		20					25					30			
Glu	Leu	Lys	Ser	Glu	Leu	Ala	Ser	Pro	Phe	Ala	Ala	Ile	Tyr	Asp	Thr
	35					40					45				
Lys	Ala	Lys	Asn	Lys	Val	Thr	Asp	Gln	Pro	Val	Gly	Thr	Gly	Pro	Tyr
	50				55					60					
Gln	Ile	Asp	Ser	Tyr	Lys	Arg	Ser	Gln	Lys	Ile	Val	Leu	Lys	Gln	Phe
65				70				75					80		
Lys	Asp	Tyr	Trp	Gln	Gly	Thr	Pro	Lys	Leu	Lys	Arg	Ile	Asn	Val	Thr
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<210> 2035

<211> 495

<212> DNA

<213> Homo sapiens

<400> 2035

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 <211> 98
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Leu Ala Cys Leu His Phe Cys Cys Tyr Cys Cys Tyr Leu Cys Val Gly
 50 55 60
 Ala Pro Asn Gly Val Pro Tyr Phe Ser Asp Ala Val Phe Ile Phe Leu
 65 70 75 80
 Asp Ser Phe Tyr Cys Leu Val Phe Ser Leu His Asn Pro Tyr Cys Ser
 85 90 95
 Leu Tyr

<210> 2037
 <211> 327
 <212> DNA
 <213> Homo sapiens

<400> 2037
 acgcgtgaag ggaaggggga gaccccgga gaaatggaga aatgggggag cacacagacg
 60
 ggaagagtga ggttggagtg cctttccgc gctcatcttc cgccccact ccacgccag
 120
 caaatccaaa caccggggcc tctggtggcc cgggcttcca tttcccttg aggggcaagg
 180
 gcgtttcttc ttccgcccac ccggggcgct gagcggcgga aacagcggcg ggggctttgt
 240
 ggtcccgggg ggtccgagtg tgtgtcagg gctggggcg gggatgggcg cggcccttg
 300
 gtatccctca cgtcctggt tcatgag
 327

<210> 2038
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 2038
 Met Glu Lys Trp Gly Arg Thr Gln Thr Gly Arg Val Arg Leu Glu Cys
 1 5 10 15
 Leu Ser Arg Ala His Leu Pro Ser Pro Leu His Ala Gln Gln Ile Gln

```

      20      25      30
Thr Pro Arg Pro Leu Val Ala Arg Ala Ser Ile Ser Pro Gly Gly Ala
      35      40      45
Arg Ala Phe Pro Leu Pro Pro Asn Arg Gly Ala Glu Arg Arg Glu Gln
      50      55      60
Arg Arg Gly Leu Cys Gly Pro Gly Gly Ser Glu Cys Val Ser Gly Ala
65      70      75      80
Gly Ala Gly Asp Gly Arg Gly Pro Trp Val Ser Leu Thr Val Leu Val
      85      90      95
His Glu

```

<210> 2039

<211> 307

<212> DNA

<213> Homo sapiens

<400> 2039

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accggtgata cactctgcga aagcggccgc gagcgaagcg ttcttggtct tcttcgagat
60
cgcgatgtat tgccccgaaa acagcggcctt gatgccgtca ttgagaggct ctgggcccaac
120
accggtacgg gcatatgcct gggcggcatt cttttggatg ttgcaagaa aggacgcatt
180
cggcgtgccg aaagccaggg atccttcacc gtagaccttg gaccgatgga ggcccccggc
240
aatcgagtcc ttcgaaattc ccccttgcca tacatgtcgg ccacgtcgt cagccagagt
300
aacgcgt
307

```

<210> 2040

<211> 94

<212> PRT

<213> Homo sapiens

<400> 2040

```

Met Ala Asp Met Tyr Ala Lys Gly Glu Phe Arg Arg Thr Arg Leu Pro
1      5      10      15
Gly Ala Ser Ile Gly Pro Arg Ser Thr Val Lys Asp Pro Trp Leu Ser
      20      25      30
Ala Arg Arg Met Arg Pro Phe Phe Ala Thr Ser Lys Arg Met Pro Pro
      35      40      45
Arg His Met Pro Val Pro Val Leu Ala Gln Ser Leu Ser Met Thr Ala
50      55      60
Ser Ser Arg Cys Phe Pro Gly Asn Thr Ser Arg Ser Arg Arg Arg Pro
65      70      75      80
Arg Thr Leu Arg Ser Arg Pro Leu Ser Gln Ser Gly Ser Pro
      85      90

```

<210> 2041

<211> 348

<212> DNA

<213> Homo sapiens

<400> 2041

nnccggcgat gcagggattc gcccgcgatg cgctcgaacc cggcgcgggg ggcgttcctc
 60
 gccagcttcc tgccgttcgc cagacgcata gccgaggcgg ggggtgcgcaa ttcgctcgcc
 120
 cagctggctcg ccaagctgac cctgccccgc atgccccgaca tctaccaggg ctgcgagatg
 180
 tgggacctca gcctggctga ccgggacaaat cgccgccccg tcgactacga gacacgcgac
 240
 gcggccctgg ccggctgggt cgcgaccccc ccggaggaac gcgccggggc gctgcgcacc
 300
 ctgctgacgg attggcgag cggcgcggtc aagctggccg tgacgcgt
 348

<210> 2042

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2042

Xaa Arg Arg Cys Arg Asp Ser Pro Ala Met Arg Ser Asn Pro Ala Arg
 1 5 10 15
 Gly Ala Phe Leu Ala Ser Phe Leu Pro Phe Ala Arg Arg Ile Ala Glu
 20 25 30
 Ala Gly Val Arg Asn Ser Leu Ala Gln Leu Val Ala Lys Leu Thr Leu
 35 40 45
 Pro Gly Met Pro Asp Ile Tyr Gln Gly Cys Glu Met Trp Asp Leu Ser
 50 55 60
 Leu Val Asp Arg Asp Asn Arg Arg Pro Val Asp Tyr Glu Thr Arg Asp
 65 70 75 80
 Ala Ala Leu Ala Gly Trp Val Ala Thr Pro Pro Glu Glu Arg Ala Ala
 85 90 95
 Ala Leu Arg Thr Leu Leu Thr Asp Trp Arg Ser Gly Ala Val Lys Leu
 100 105 110
 Ala Val Thr Arg
 115

<210> 2043

<211> 712

<212> DNA

<213> Homo sapiens

<400> 2043

gatctgacgg tctcgactaa gcctgaccat tccgaggtca ccgacgccga ccttgccgct
 60
 gaagattcgg tgccgagagc cctgtctcga atgcgctccc gggatgccgt ccacggcgag
 120
 gaacgtgccg ataccgggga tggacccccg cggtggatca ttgatccgat cgacggcact
 180
 gcgaattttc tgcgtgggggt cccagtgtgg gccaccctca ttgccctcag cgtcgaggac
 240
 cagattgtcg catctgtggt ctctgtcct gccctcaagc gacgctgggt ggcagcccgt
 300

ggctcaggag catggtcggg caaatccctg gcctcagcga caccgatcca cgtctcgaat
 360
 gtgcgcaatc ttgccgacgc attcttgtcc tactcttcgc tgcacggatg ggtcgagagc
 420
 ggacgagggc acgggttcgg tgaactcatg cggtcggtgt ggcggaacccg agccttcggc
 480
 gatttctggt cttacatgat ggtggcagaa ggtgtcgtcg atgtggcatg cgagccggaa
 540
 ctcagcctgc acgacatggc cgccctcgac gctatcgtca ccgaggcggg cggtaagttc
 600
 accggtctcg atggcaaaga cggcccgtagg tctgggaatg ctctggcgtc gaatggtttc
 660
 cttcatgacc aggccctagc catggtccag cctcaggagt gagcaccgat cg
 712

<210> 2044

<211> 233

<212> PRT

<213> Homo sapiens

<400> 2044

Asp	Leu	Thr	Val	Ser	Thr	Lys	Pro	Asp	His	Ser	Glu	Val	Thr	Asp	Ala
1				5				10						15	
Asp	Leu	Ala	Val	Glu	Asp	Ser	Val	Arg	Arg	Ala	Leu	Ser	Arg	Met	Arg
		20						25					30		
Ser	Arg	Asp	Ala	Val	His	Gly	Glu	Arg	Ala	Asp	Thr	Gly	Asp	Gly	
		35				40					45				
Pro	Arg	Arg	Trp	Ile	Ile	Asp	Pro	Ile	Asp	Gly	Thr	Ala	Asn	Phe	Leu
	50					55					60				
Arg	Gly	Val	Pro	Val	Trp	Ala	Thr	Leu	Ile	Ala	Leu	Ser	Val	Glu	Asp
65					70					75				80	
Gln	Ile	Val	Ala	Ser	Val	Val	Ser	Ala	Pro	Ala	Leu	Lys	Arg	Arg	Trp
				85					90					95	
Trp	Ala	Ala	Arg	Gly	Ser	Gly	Ala	Trp	Ser	Gly	Lys	Ser	Leu	Ala	Ser
			100					105					110		
Ala	Thr	Pro	Ile	His	Val	Ser	Asn	Val	Arg	Asn	Leu	Ala	Asp	Ala	Phe
		115					120				125				
Leu	Ser	Tyr	Ser	Ser	Leu	His	Gly	Trp	Val	Glu	Ser	Gly	Arg	Gly	His
	130					135					140				
Gly	Phe	Gly	Glu	Leu	Met	Arg	Ser	Val	Trp	Arg	Thr	Arg	Ala	Phe	Gly
145					150					155				160	
Asp	Phe	Trp	Ser	Tyr	Met	Met	Val	Ala	Glu	Gly	Val	Val	Asp	Val	Ala
				165					170				175		
Cys	Glu	Pro	Glu	Leu	Ser	Leu	His	Asp	Met	Ala	Ala	Leu	Asp	Ala	Ile
		180						185					190		
Val	Thr	Glu	Ala	Gly	Gly	Lys	Phe	Thr	Gly	Leu	Asp	Gly	Lys	Asp	Gly
		195					200					205			
Pro	Trp	Ser	Gly	Asn	Ala	Leu	Ala	Ser	Asn	Gly	Phe	Leu	His	Asp	Gln
	210					215						220			
Ala	Leu	Ala	Met	Val	Gln	Pro	Gln	Glu							
225						230									

<210> 2045

<211> 406

<212> DNA

<213> Homo sapiens

<400> 2045

```

nnttgacac cggcgactat gccgccaccg cacggatcaa tcgcggaccc agggcagggg
60
atgcgccgga tgggcgacgg tgatggaccg ggcgctggac ctgggcggtc gcttcgacga
120
cantacaggc tttggccgag gcgggttggg agaaaccggt caaccggtgg tttggccccg
180
catcaatgcc cagaaccaga agccttgccg attcgtccca ggccgttcaa ggccgatggc
240
gagatcgctg cgatgactgg cgacggtgtc aacgacgccc cctcgctcaa ggcggcccat
300
atcgggtgtc ccatggacaa acgcggcacc gacgtcgcgc gcgaggcttc cgccatggtc
360
ctgctcgagg atgattttgg atcgatcgtg cagtcgggtcc ggctcg
406

```

<210> 2046

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2046

```

Xaa Trp Thr Pro Ala Thr Met Pro Pro Pro His Gly Ser Ile Ala Asp
 1           5           10           15
Pro Gly Gln Gly Met Arg Arg Met Gly Asp Gly Asp Gly Pro Gly Ala
          20           25           30
Gly Pro Gly Arg Ser Leu Arg Arg Xaa Tyr Arg Leu Trp Pro Arg Arg
          35           40           45
Val Gly Arg Asn Arg Ser Thr Gly Gly Leu Ala Pro His Gln Cys Pro
          50           55           60
Glu Pro Glu Ala Leu Arg Ile Arg Pro Arg Pro Phe Lys Ala Asp Gly
          65           70           75           80
Glu Ile Val Ala Met Thr Gly Asp Gly Val Asn Asp Ala Pro Ser Leu
          85           90           95
Lys Ala Ala His Ile Gly Val Ala Met Asp Lys Arg Gly Thr Asp Val
          100          105          110
Ala Arg Glu Ala Ser Ala Met Val Leu Leu Glu Asp Asp Phe Gly Ser
          115          120          125
Ile Val Gln Ser Val Arg Leu
          130          135

```

<210> 2047

<211> 796

<212> DNA

<213> Homo sapiens

<400> 2047

```

aagcttttga acgagacccc tgagctctgg gttagacccc gaggaagccc agcaacagga
60
tgaggaattt gagaagaaga ttccaagtgt ggaagacagc cttggagagg gcagcagggg
120

```

tgctggccgg ccaggagaga gaggatccgg gggcttggtc agtcctagca ctgcccacgt
 180
 gccggatggg gcactcgggc agagagacca gagcagctgg caaaacagtg atgctagcca
 240
 ggaggtggga gggcatcagg agagacagca ggcaggggct cagggccctg gcagtgtga
 300
 cctggaagat ggggagatgg gaaagcgagg ctgggtcggg gagtttagcc tcagtgttgg
 360
 cccccagcga gaggcagcat ttagcccagg gcagcaggac tggagccggg acttctgcat
 420
 cgaggccagt gagaggagct atcagtttgg catcattggc aacgacagag tgagtgttgc
 480
 tggctttagc ccttctagca agatggaagg tggtcacttt gtgcctcctg ggaagaccac
 540
 agctggctcg gtggactgga ctgaccagct gggcttcagg aacttggaag tgtccagctg
 600
 tgtgggttct gggggctcga gcgaggccag ggagagtgcc gtgggacaga tgggctggtc
 660
 aggtggcctg agcttgagag acatgaacct gaccggctgt ttggaaagtg gagggctcga
 720
 agagccgggg ggaatcgga ttggggagaa ggactggact tctgatgtta atgtgaagag
 780
 caaagatttg gctgag
 796

<210> 2048

<211> 160

<212> PRT

<213> Homo sapiens

<400> 2048

Met	Gly	Lys	Arg	Gly	Trp	Val	Gly	Glu	Phe	Ser	Leu	Ser	Val	Gly	Pro
1				5					10					15	
Gln	Arg	Glu	Ala	Ala	Phe	Ser	Pro	Gly	Gln	Gln	Asp	Trp	Ser	Arg	Asp
			20					25					30		
Phe	Cys	Ile	Glu	Ala	Ser	Glu	Arg	Ser	Tyr	Gln	Phe	Gly	Ile	Ile	Gly
		35				40						45			
Asn	Asp	Arg	Val	Ser	Gly	Ala	Gly	Phe	Ser	Pro	Ser	Ser	Lys	Met	Glu
	50				55					60					
Gly	Gly	His	Phe	Val	Pro	Pro	Gly	Lys	Thr	Thr	Ala	Gly	Ser	Val	Asp
65				70					75					80	
Trp	Thr	Asp	Gln	Leu	Gly	Leu	Arg	Asn	Leu	Glu	Val	Ser	Ser	Cys	Val
			85					90						95	
Gly	Ser	Gly	Gly	Ser	Ser	Glu	Ala	Arg	Glu	Ser	Ala	Val	Gly	Gln	Met
			100					105					110		
Gly	Trp	Ser	Gly	Gly	Leu	Ser	Leu	Arg	Asp	Met	Asn	Leu	Thr	Gly	Cys
	115					120					125				
Leu	Glu	Ser	Gly	Gly	Ser	Glu	Glu	Pro	Gly	Gly	Ile	Gly	Ile	Gly	Glu
	130					135					140				
Lys	Asp	Trp	Thr	Ser	Asp	Val	Asn	Val	Lys	Ser	Lys	Asp	Leu	Ala	Glu
145					150				155						160

<210> 2049

<211> 516

<212> DNA

<213> Homo sapiens

<400> 2049

cgctcgctt acggtgcgt gaataccagc ctgctggcgc tggcggtcag ctgcgctcg
 60
 ctgttctcgc ggatagtgtt cgggctgatg ccacgtctga tgtgcggggt gattgaactg
 120
 gccaacgctc ccccgccaat cgccctgggc ctgttagtag tcgccattag cggcccttca
 180
 gcctacgggtg ccgcctgtgc ggtgatgttg gtcagttggg ctccgctggc cgcccattgt
 240
 gcttcgttgt tggcggaagc ccgcacgcag cccatatatcc gcatgttgcc ggtattgggc
 300
 gtcggccgat ggcgcacgct gaccactac ctgctgccgg cgctctctgc tcccctgctg
 360
 cgccacgccca tgttgctct gccgggcatt gcgctggcgc tggcggcctt gggttttttt
 420
 ggtcttgggc cgcagccacc cagtgcagaa tgggggctgg tgctggcgga aggcattgct
 480
 tatctcgaac gggcgccctg gggagtcctg gcaccg
 516

<210> 2050

<211> 172

<212> PRT

<213> Homo sapiens

<400> 2050

Arg	Val	Ala	Tyr	Gly	Ala	Leu	Asn	Thr	Ser	Leu	Leu	Ala	Leu	Ala	Val	1	5	10	15
Ser	Phe	Ala	Ser	Leu	Phe	Leu	Gly	Ile	Val	Phe	Gly	Leu	Met	Pro	Arg	20	25	30	
Leu	Met	Cys	Gly	Val	Ile	Glu	Leu	Ala	Asn	Ala	Pro	Pro	Pro	Ile	Ala	35	40	45	
Leu	Gly	Leu	Leu	Val	Val	Ala	Ile	Ser	Gly	Pro	Ser	Ala	Tyr	Gly	Ala	50	55	60	
Ala	Cys	Ala	Val	Met	Leu	Val	Ser	Trp	Ala	Pro	Leu	Ala	Ala	His	Cys	65	70	75	80
Ala	Ser	Leu	Leu	Ala	Glu	Ala	Arg	Thr	Gln	Pro	Tyr	Ile	Arg	Met	Leu	85	90	95	
Pro	Val	Leu	Gly	Val	Gly	Arg	Trp	Arg	Thr	Leu	Thr	His	Tyr	Leu	Leu	100	105	110	
Pro	Ala	Leu	Ser	Ala	Pro	Leu	Leu	Arg	His	Ala	Met	Leu	Arg	Leu	Pro	115	120	125	
Gly	Ile	Ala	Leu	Ala	Leu	Ala	Ala	Leu	Gly	Phe	Phe	Gly	Leu	Gly	Pro	130	135	140	
Gln	Pro	Pro	Ser	Ala	Glu	Trp	Gly	Leu	Val	Leu	Ala	Glu	Gly	Met	Pro	145	150	155	160
Tyr	Leu	Glu	Arg	Ala	Pro	Trp	Gly	Val	Leu	Ala	Pro					165	170		

<210> 2051

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2051

gagcaaaact atcgttctac cggcaatatt ctgaaaagtg ccaaccaact tatttcgaat
 60
 aatagtgatc gtctcggtaa gaatttatgg accgacgggtg aaatggggga gccagtaggt
 120
 atttatgcag catttaatga attagatgag gcaaaatttg tggcgtctca aatccaaaat
 180
 tgggtagatg atgggtggga attagatgat tgtgctgttt tatatcgtag taatagccaa
 240
 tctcgtgtta ttgaagaagc cttgattcgt tgccaaattc cttatcgaat ttatggcggg
 300
 atgcgattct tcgaacgccca agaaattaaa gatgcgttgg catatttacg ttttaattaat
 360
 aatcgtcaag atgatgccgc atttgagcgt gtgattaata cgcctacgcg t
 411

<210> 2052

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2052

Glu Gln Asn Tyr Arg Ser Thr Gly Asn Ile Leu Lys Ser Ala Asn Gln
 1 5 10 15
 Leu Ile Ser Asn Asn Ser Asp Arg Leu Gly Lys Asn Leu Trp Thr Asp
 20 25 30
 Gly Glu Met Gly Glu Pro Val Gly Ile Tyr Ala Ala Phe Asn Glu Leu
 35 40 45
 Asp Glu Ala Lys Phe Val Ala Ser Gln Ile Gln Asn Trp Val Asp Asp
 50 55 60
 Gly Gly Glu Leu Asp Asp Cys Ala Val Leu Tyr Arg Ser Asn Ser Gln
 65 70 75 80
 Ser Arg Val Ile Glu Glu Ala Leu Ile Arg Cys Gln Ile Pro Tyr Arg
 85 90 95
 Ile Tyr Gly Gly Met Arg Phe Phe Glu Arg Gln Glu Ile Lys Asp Ala
 100 105 110
 Leu Ala Tyr Leu Arg Leu Ile Asn Asn Arg Gln Asp Asp Ala Ala Phe
 115 120 125
 Glu Arg Val Ile Asn Thr Pro Thr Arg
 130 135

<210> 2053

<211> 287

<212> DNA

<213> Homo sapiens

<400> 2053

nccatggaag ccttcaatct tgtaagagaa agtgaacagc tgttttccat atgccaaatc
 60
 ccgctcctct gctggatcct gtgtaccagt ctgaagcaag agatgcagaa aggaaaagac
 120

ctggccctga cctgccagag cactacctct gtgtactcct ctttcgtctt taacctgttc
 180
 acacctgagg gtgcgagagg cccgactccg caaaccagc accagctgaa ggcctgtgc
 240
 tccctggctg cagagggat gtggacagac acatttgagt tttgtga
 287

<210> 2054
 <211> 79
 <212> PRT
 <213> Homo sapiens

<400> 2054
 Ile Cys Gln Ile Pro Leu Leu Cys Trp Ile Leu Cys Thr Ser Leu Lys
 1 5 10 15
 Gln Glu Met Gln Lys Gly Lys Asp Leu Ala Leu Thr Cys Gln Ser Thr
 20 25 30
 Thr Ser Val Tyr Ser Ser Phe Val Phe Asn Leu Phe Thr Pro Glu Gly
 35 40 45
 Ala Glu Gly Pro Thr Pro Gln Thr Gln His Gln Leu Lys Ala Leu Cys
 50 55 60
 Ser Leu Ala Ala Glu Gly Met Trp Thr Asp Thr Phe Glu Phe Cys
 65 70 75

<210> 2055
 <211> 298
 <212> DNA
 <213> Homo sapiens

<400> 2055
 nnacgcgttg ttatgaacaa tgacgggtgc ctctaccccg atacctgcgt ggggtactgat
 60
 tcccacacca ccatggaaaa tggctctggc attctgggct ggggcgtcgg tggattgaa
 120
 gccgaggctg ctatgcttgg ccagcccatc tccatgctta tccccgtgt tgttggttt
 180
 aaacttactg gccaaacaca gccgggtgct accgctacag atgttggtct taccattact
 240
 gatatgcttc gccagcatgg tgtgggtgga aaattcgggg aattctatgg gggaagcg
 298

<210> 2056
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 2056
 Xaa Arg Val Val Met Asn Asn Asp Gly Val Leu Tyr Pro Asp Thr Cys
 1 5 10 15
 Val Gly Thr Asp Ser His Thr Thr Met Glu Asn Gly Leu Gly Ile Leu
 20 25 30
 Gly Trp Gly Val Gly Gly Ile Glu Ala Glu Ala Met Leu Gly Gln
 35 40 45
 Pro Ile Ser Met Leu Ile Pro Arg Val Val Gly Phe Lys Leu Thr Gly

50 55 60
 Gln Thr Gln Pro Gly Val Thr Ala Thr Asp Val Val Leu Thr Ile Thr
 65 70 75 80
 Asp Met Leu Arg Gln His Gly Val Gly Gly Lys Phe Gly Glu Phe Tyr
 85 90 95
 Gly Gly Ser

<210> 2057

<211> 569

<212> DNA

<213> Homo sapiens

<400> 2057

acgcgtcccg acagtaccga ctataacgga ggaaactatc aggaacggta taaaatttta
 60
 gcagaaattc gtaaggctct tgaagacgga gatcgccaaa aagccaaacg attagctgaa
 120
 caaaatctag ttggacaaa caacgccag tatggtcgtt atctagcctt tggatgatc
 180
 ttcattggtct tcaataacca gaaaaggagg ctggatacag ttacagacta tcaccgtggt
 240
 ttggatatca cagaagccac tactacaact tcttacaccc aagatggaac gaccttttaa
 300
 agagaaacct tctcaagtta ccctgatgat gttactgtta ctacttgac caaaaaggg
 360
 gacaaaaaac ttgattttac agtttggat agcttaacag aagatttact tgctaacgga
 420
 gactactcag cggaatatc taactacaag agtggccatg ttacgacaga cccaaatggt
 480
 atctactaa aaggtacagt caaagataat ggcctccagt tcgcaccta tctaggaatt
 540
 aaaacggacg gaaaagttac tgttcatga
 569

<210> 2058

<211> 128

<212> PRT

<213> Homo sapiens

<400> 2058

Met Val Phe Asn Asn Gln Lys Lys Gly Leu Asp Thr Val Thr Asp Tyr
 1 5 10 15
 His Arg Gly Leu Asp Ile Thr Glu Ala Thr Thr Thr Ser Tyr Thr
 20 25 30
 Gln Asp Gly Thr Thr Phe Lys Arg Glu Thr Phe Ser Ser Tyr Pro Asp
 35 40 45
 Asp Val Thr Val Thr His Leu Thr Gln Lys Gly Asp Lys Lys Leu Asp
 50 55 60
 Phe Thr Val Trp Asn Ser Leu Thr Glu Asp Leu Leu Ala Asn Gly Asp
 65 70 75 80
 Tyr Ser Ala Glu Tyr Ser Asn Tyr Lys Ser Gly His Val Thr Thr Asp
 85 90 95
 Pro Asn Gly Ile Leu Leu Lys Gly Thr Val Lys Asp Asn Gly Leu Gln

100 105 110
 Phe Ala Ser Tyr Leu Gly Ile Lys Thr Asp Gly Lys Val Thr Val His
 115 120 125

<210> 2059
 <211> 644
 <212> DNA
 <213> Homo sapiens

<400> 2059
 gaattcgtgc caccgtgcc. atacttcgcc acgcaacaga gtgccgtcag cggattgggc
 60
 agcaatcgac ctgtaggact cagccatgat cgactgggca tcctcgtata gtcgcatgac
 120
 cgcaaccgcc tgcgttcca agcctgcagc gacgtaagag gccctctcac aactgaacc
 180
 gatcgctcca gacaacgtgg aagcgataac ctgcgctcgc ttctgctgat tctgggcca
 240
 gctcgacaag aagaaccgca gaggggagac ggcttgggtca gggagcgac cttcagcgtt
 300
 cgtcttggtc tccgggacag caaaaagcgg ggaatcagcc aggccacgct ccgtcatgag
 360
 tcggccgagg tccgccggtta cctctctcat ggcttccaca ggaacgcggt cacacaccac
 420
 cgcgatcgac gcgtgcctct cttgagcctc gttgaggaaa tcccacggca cagcgtcagc
 480
 gtagcgggct gctgagggtga caaagatcca cagatccgag gcctggagca actgagccgc
 540
 cagatcacga ttgcgggtca ccacagagtc gatgtccggg gcacgagga tggccaaacc
 600
 tcgcggaatc cttgactccg cgacgagctg caaactcgac gcgt
 644

<210> 2060
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 2060
 Met Arg Glu Val Pro Ala Asp Leu Gly Arg Leu Met Thr Glu Arg Gly
 1 5 10 15
 Leu Ala Asp Ser Pro Leu Phe Ala Val Pro Glu Thr Lys Thr Asn Ala
 20 25 30
 Glu Gly Ala Leu Pro Asp Gln Ala Val Ala Pro Leu Arg Phe Phe Leu
 35 40 45
 Ser Ser Leu Ala Gln Asn Gln Gln Lys Arg Arg Glu Val Ile Ala Ser
 50 55 60
 Thr Leu Ser Gly Ala Ile Gly Ser Val Cys Glu Arg Ala Ser Tyr Val
 65 70 75 80
 Ala Ala Gly Leu Glu Ala Gln Ala Val Ala Ala Ser Arg Leu Tyr Glu
 85 90 95
 Asp Ala Gln Ser Ile Met Ala Glu Ser Tyr Arg Ser Ile Ala Ala Gln
 100 105 110
 Ser Ala Asp Gly Thr Leu Leu Arg Gly Glu Val Leu Ala Arg Trp His

115 120 125
 Glu Phe
 130
 <210> 2061
 <211> 481
 <212> DNA
 <213> Homo sapiens
 <400> 2061
 gttaacctgg taaggagagc gacacaggaa ggtgcagggg ttgccatggt gtggccccag
 60
 atgctgtgat tacgcgccag ccccgtcaca ccgtacgggt ggtaggactg ggcaaagaag
 120
 acgccgccac ctggatgcac tgaggtgtgc acagccacgt ggagatgatg ctgggggctc
 180
 acggtgactc tcaggaggcc ctggcctggc ctatctggag ccttctctgt gaaatgaggc
 240
 tggtaacgcc cactagcagg gttgtagggg acatggatct gtggccacct cctcaagggt
 300
 tgccacacgc accaggtcct gactgggagt ccggccccca gggcctgtgg atggctggcc
 360
 tgggcccagc ctccgcccc aaggggtgctg gcacctggca tgtgcccgcac agttggggcc
 420
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 480
 t
 481
 <210> 2062
 <211> 133
 <212> PRT
 <213> Homo sapiens
 <400> 2062
 Met Pro Gly Ala Ser Thr Leu Gly Gly Gly Trp Ala Gln Ala Ser
 1 5 10 15
 His Pro Gln Ala Leu Gly Ala Gly Leu Pro Val Arg Thr Trp Cys Val
 20 25 30
 Trp Gln Pro Leu Arg Arg Trp Pro Gln Ile His Val Pro Tyr Asn Pro
 35 40 45
 Ala Ser Gly Arg Tyr Gln Pro His Phe Thr Glu Lys Ala Pro Asp Arg
 50 55 60
 Pro Gly Gln Gly Leu Leu Arg Val Thr Val Ser Pro Gln His His Leu
 65 70 75 80
 His Val Ala Val His Thr Ser Val His Pro Gly Gly Gly Val Phe Phe
 85 90 95
 Ala Gln Ser Tyr His Pro Tyr Gly Val Thr Gly Leu Ala Arg Asn His
 100 105 110
 Ser Ile Trp Gly His Thr Met Ala Thr Pro Ala Pro Ser Cys Val Ala
 115 120 125
 Leu Leu Thr Arg Leu
 130

<210> 2063

<211> 419

<212> DNA

<213> Homo sapiens

<400> 2063

```

gccggcgccg tcgagcgcggt gcctttcaat atcgaggccc aagacatggt gctgctcatc
60
gcggacacca atgccccgca catgctttcc gacggccaat acgcctcccc ccggggcatc
120
atcgagcgccg tccaatctgc cgccgggtgc tccatccgcy agatctcgaa tgcgggtggac
180
tttgcgcgca ccgtcaatcc cgccgaggcg gaactctatc gccgcgcggt gcaccacgtg
240
gtggaagaaa ccaaccggac cctagatgcc gctaccgcyg tggcatcttc cgatctagat
300
acattccggc ggcttatgcy cgagagccac atctccctgc gcgaccttta tgaggtcacc
360
actccggagc tcgactccgt ttttaccgcy gccggcgagc tgggcgctcy catgannnn
419

```

<210> 2064

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2064

```

Ala Gly Ala Val Glu Arg Val Pro Phe Asn Ile Glu Ala Gln Asp Met
1           5           10          15
Val Leu Leu Ile Ala Asp Thr Asn Ala Pro His Met Leu Ser Asp Gly
20          25          30
Gln Tyr Ala Ser Arg Arg Gly Ile Ile Asp Ala Val Gln Ser Ala Ala
35          40          45
Gly Cys Ser Ile Arg Glu Ile Ser Asn Ala Val Asp Phe Ala Ala Thr
50          55          60
Val Asn Pro Ala Glu Ala Glu Leu Tyr Arg Arg Arg Val His His Val
65          70          75          80
Val Glu Glu Thr Asn Arg Thr Leu Asp Ala Ala Thr Ala Leu Ala Ser
85          90          95
Ser Asp Leu Asp Thr Phe Arg Arg Leu Met Arg Glu Ser His Ile Ser
100         105         110
Leu Arg Asp Leu Tyr Glu Val Thr Thr Pro Glu Leu Asp Ser Val Phe
115         120         125
Thr Ala Ala Gly Glu Leu Gly Ala Arg Met Xaa
130         135

```

<210> 2065

<211> 598

<212> DNA

<213> Homo sapiens

<400> 2065

```

gccggcgcta tggcctctct gctcgccgac gccgccgatg cccttcccgg cgcaaagggtg
60

```

cgcgcgaccg ttactggatc ggcgggattg ggaaccgcag aggcattggg ccttactttc
 120
 attcaggagg tcatagctga gacggccgcc gtccaacgtt ggaatcccga cgccgacgtg
 180
 cttctcgaac tcggtgggtga ggatgccaaag atcacctacc ttaagccggt ccccgaacag
 240
 cgcatgaatg gttcgtgtgc tgggtggcacc ggtgccttca tcgaccagat ggctaccctg
 300
 ctgcacaccg aactccccg cctcaatgac ctgcacatcc gagccaagac catccatecg
 360
 atcgctcgc gctgtggtgt ttttgccaag tccgaccttc agcccctcat taacgagggg
 420
 gcccgccacg aggatctggc tgctcgggtc ctgcaggctg tcgccactca gtgcattgcc
 480
 ggcttggeat gtggtcgccc gattcgaggt aaggtcatct tccttggcgg tccgcttcac
 540
 tttatgcaa gtttgcgaga cgctttctcg cgcgtcctcg acggtaaggt tgacgcgt
 598

<210> 2066

<211> 199

<212> PRT

<213> Homo sapiens

<400> 2066

Ala	Gly	Ala	Met	Ala	Ser	Leu	Leu	Ala	Asp	Ala	Ala	Asp	Ala	Leu	Pro
1				5				10					15		
Gly	Ala	Lys	Val	Arg	Ala	Thr	Val	Thr	Gly	Ser	Ala	Gly	Leu	Gly	Thr
			20					25					30		
Ala	Glu	Ala	Leu	Gly	Leu	Thr	Phe	Ile	Gln	Glu	Val	Ile	Ala	Glu	Thr
			35				40					45			
Ala	Ala	Val	Gln	Arg	Trp	Asn	Pro	Asp	Ala	Asp	Val	Leu	Leu	Glu	Leu
		50				55					60				
Gly	Gly	Glu	Asp	Ala	Lys	Ile	Thr	Tyr	Leu	Lys	Pro	Val	Pro	Glu	Gln
65					70					75				80	
Arg	Met	Asn	Gly	Ser	Cys	Ala	Gly	Gly	Thr	Gly	Ala	Phe	Ile	Asp	Gln
				85					90					95	
Met	Ala	Thr	Leu	Leu	His	Thr	Asp	Thr	Pro	Gly	Leu	Asn	Asp	Leu	Ala
			100					105					110		
Ser	Arg	Ala	Lys	Thr	Ile	His	Pro	Ile	Ala	Ser	Arg	Cys	Gly	Val	Phe
			115				120					125			
Ala	Lys	Ser	Asp	Leu	Gln	Pro	Leu	Ile	Asn	Glu	Gly	Ala	Arg	His	Glu
			130			135					140				
Asp	Leu	Ala	Ala	Ser	Val	Leu	Gln	Ala	Val	Ala	Thr	Gln	Cys	Ile	Ala
145					150					155				160	
Gly	Leu	Ala	Cys	Gly	Arg	Pro	Ile	Arg	Gly	Lys	Val	Ile	Phe	Leu	Gly
				165					170					175	
Gly	Pro	Leu	His	Phe	Met	Pro	Ser	Leu	Arg	Asp	Ala	Phe	Ser	Arg	Val
			180					185					190		
Leu	Asp	Gly	Lys	Val	Asp	Ala									
			195												

<210> 2067

<211> 366

<212> DNA

<213> Homo sapiens

<400> 2067

```

ttccagcaga tgctgcaaac ctggacccgc agcggcacgc tgcaggaggc cgtggccaac
60
aagatcgccg aatggctgga tgccgacctg caacagtggg acatttcccg cgatgcaccg
120
tacttcggtt tcgagatccc gggcgagcca ggcaagtatt tctacgtgtg gctggacgcg
180
ccgatcggtt acatggccag tttcaagaac ctgtgcgacc gcacgccgga gctggacttc
240
gatgctttct gggccaagga ctccaccgcc gagctgtacc atttcacggg caaggacatc
300
gtcaacttcc acgccctgtt ctggccggcg atgctcgaag gctcgggcta ccgtaaaccg
360
accggt
366

```

<210> 2068

<211> 122

<212> PRT

<213> Homo sapiens

<400> 2068

```

Phe Gln Gln Met Leu Gln Thr Trp Thr Arg Ser Gly Thr Leu Gln Glu
 1             5             10             15
Ala Val Ala Asn Lys Ile Ala Glu Trp Leu Asp Ala Asp Leu Gln Gln
          20             25             30
Trp Asp Ile Ser Arg Asp Ala Pro Tyr Phe Gly Phe Glu Ile Pro Gly
      35             40             45
Glu Pro Gly Lys Tyr Phe Tyr Val Trp Leu Asp Ala Pro Ile Gly Tyr
      50             55             60
Met Ala Ser Phe Lys Asn Leu Cys Asp Arg Thr Pro Glu Leu Asp Phe
65             70             75             80
Asp Ala Phe Trp Ala Lys Asp Ser Thr Ala Glu Leu Tyr His Phe Ile
          85             90             95
Gly Lys Asp Ile Val Asn Phe His Ala Leu Phe Trp Pro Ala Met Leu
      100             105             110
Glu Gly Ser Gly Tyr Arg Lys Pro Thr Gly
      115             120

```

<210> 2069

<211> 280

<212> DNA

<213> Homo sapiens

<400> 2069

```

cctagagagg atggtggaga ctgtgcgtgt gcagggtgtt ccggaacctt ccctgggatg
60
catggggcct cgccgcaggc catctctcca gacctgggct caccctgccc ctgtgctgtt
120
gcctttggct ggaattccac cccagccttc ttgcctcaag aacgcccttc ccccttcaga
180

```

tctcatgggc acaggccccg tcttcctaaa cggggtcaga gccccagta atcatgacaa
 240
 agaccctctc ctcgatcaag ctttgggtcaa gctcctaccc
 280

<210> 2070

<211> 90

<212> PRT

<213> Homo sapiens

<400> 2070

Met Val Glu Thr Val Arg Val Gln Gly Val Pro Glu Pro Ser Leu Gly
 1 5 10 15
 Cys Met Gly Pro Arg Arg Arg Pro Ser Leu Gln Thr Trp Ala His Pro
 20 25 30
 Ala Pro Val Leu Leu Pro Leu Ala Gly Ile Pro Pro Gln Pro Ser Cys
 35 40 45
 Leu Lys Asn Ala Leu Pro Pro Ser Asp Leu Met Gly Thr Gly Pro Val
 50 55 60
 Phe Leu Asn Gly Val Arg Ala Pro Ser Asn His Asp Lys Asp Pro Leu
 65 70 75 80
 Leu Asp Gln Ala Leu Val Lys Leu Leu Pro
 85 90

<210> 2071

<211> 399

<212> DNA

<213> Homo sapiens

<400> 2071

acgcgtgtcc agcagactta gaaagcaggt tcctcttgtc atacagcacg ttaacatagc
 60
 tgacgaggcc tgggtgtctt catcagtact gtgatgactc tttcaccttt gacttcagat
 120
 gctggcgctt tttacttttt gtgccaaact ctacacatga aacacttttg gaataactac
 180
 agacatgact ttctttatct ggggaaaagg agggcattaa accagattag gggctgggag
 240
 gggagggttg caggggatga gctgctcttg aggaagaggc agagatcaag cttcactcag
 300
 cagctggatt ctcacctagt ttatagactg aaatcctgca aggtgggttac aacagtgaac
 360
 aatatgttca tacataaaga ctctaccctc aggtgatca
 399

<210> 2072

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2072

Met Thr Leu Ser Pro Leu Thr Ser Asp Ala Gly Ala Phe Tyr Phe Leu
 1 5 10 15
 Cys Gln Thr Leu His Met Lys His Phe Trp Asn Asn Tyr Arg His Asp

```

      20      25      30
Phe Leu Tyr Leu Gly Lys Arg Arg Ala Leu Asn Gln Ile Arg Gly Trp
      35      40      45
Glu Gly Arg Leu Ser Gly Asp Glu Leu Leu Leu Arg Lys Arg Gln Arg
      50      55      60
Ser Ser Phe Thr Gln Gln Leu Asp Ser His Leu Val Tyr Arg Leu Lys
      65      70      75      80
Ser Cys Lys Val Val Thr Thr Val Asn Asn Met Phe Ile His Lys Asp
      85      90      95
Ser Thr Leu Arg
      100

```

<210> 2073

<211> 339

<212> DNA

<213> Homo sapiens

<400> 2073

```

ggatccactt ctgtgccttt ccagcttcta gaggtgcct gcgttccttg gctcgtggcc
60
ccttcctcca ccttcaagcc agcagcggag gcctgagtc ttctcatgcc atctctctgt
120
tctctctctt gcctcctcct ccacaactgaa ggaccctctg gatcacactg gccccccac
180
cggatgaccc aggataatcc atctccctgt ttgaaggctg gctgattagc aaccttcatt
240
ccatctgcct ccttcattcc ccttgcccat gtaatgggat tcacagcttc tggggattag
300
gacatggaca tcttgtggcg ggggcataat tctgtcgac
339

```

<210> 2074

<211> 85

<212> PRT

<213> Homo sapiens

<400> 2074

```

Met Lys Glu Ala Asp Gly Met Lys Val Ala Asn Gln Pro Thr Phe Lys
1      5      10      15
Gln Gly Asp Gly Leu Ser Trp Val Ile Arg Trp Gly Gly Gln Cys Asp
      20      25      30
His Arg Gly Pro Ser Val Trp Arg Arg Gln Glu Arg Glu Gln Arg
      35      40      45
Asp Gly Met Arg Arg Thr Gln Ala Ser Ala Ala Gly Leu Lys Val Glu
      50      55      60
Glu Gly Ala Thr Ser Gln Gly Thr Gln Ala Ala Ser Arg Ser Trp Lys
      65      70      75      80
Gly Thr Glu Val Asp
      85

```

<210> 2075

<211> 481

<212> DNA

<213> Homo sapiens

<400> 2075

ntggccaggt tgacctcaaa ggtgtacatt gttttatgtg gcgacaatgg actgtcagaa
 60
 accaaggagc tctcctgtcc agagaagtcc ctgtttgaaa ggaattccag acacaccttt
 120
 atcctgagcg ctctgcccc actgggcctg ctgaggaaga tccgcctctg gcacgacagc
 180
 cgtgggcctt cccaggtctg gttcatcagc cacgtgatgg tgaaggagct gcacacggga
 240
 cagggctggt tcttcctgc ccagtgtctg ctgtctgccg gcaggcatga tggtcgctg
 300
 gagcgggagc tcacctgtct gcaaggggga ctgggcttct ggaagctttt ctattgcaag
 360
 ttcacagagt acctggagga tttccatgtc tggctgtcgg tgtacagcag gccctcctcc
 420
 agccgctacc tgcacacgcc gcgccccacc gtgtccttct cctgtctgtg cgtctacgcg
 480
 t
 481

<210> 2076

<211> 160

<212> PRT

<213> Homo sapiens

<400> 2076

Xaa	Ala	Arg	Leu	Thr	Ser	Lys	Val	Tyr	Ile	Val	Leu	Cys	Gly	Asp	Asn
1				5					10					15	
Gly	Leu	Ser	Glu	Thr	Lys	Glu	Leu	Ser	Cys	Pro	Glu	Lys	Ser	Leu	Phe
			20					25					30		
Glu	Arg	Asn	Ser	Arg	His	Thr	Phe	Ile	Leu	Ser	Ala	Pro	Ala	Gln	Leu
		35					40					45			
Gly	Leu	Leu	Arg	Lys	Ile	Arg	Leu	Trp	His	Asp	Ser	Arg	Gly	Pro	Ser
	50					55				60					
Pro	Gly	Trp	Phe	Ile	Ser	His	Val	Met	Val	Lys	Glu	Leu	His	Thr	Gly
65					70					75				80	
Gln	Gly	Trp	Phe	Phe	Pro	Ala	Gln	Cys	Trp	Leu	Ser	Ala	Gly	Arg	His
			85						90					95	
Asp	Gly	Arg	Val	Glu	Arg	Glu	Leu	Thr	Cys	Leu	Gln	Gly	Gly	Leu	Gly
			100					105					110		
Phe	Trp	Lys	Leu	Phe	Tyr	Cys	Lys	Phe	Thr	Glu	Tyr	Leu	Glu	Asp	Phe
	115						120					125			
His	Val	Trp	Leu	Ser	Val	Tyr	Ser	Arg	Pro	Ser	Ser	Ser	Arg	Tyr	Leu
	130					135					140				
His	Thr	Pro	Arg	Pro	Thr	Val	Ser	Phe	Ser	Leu	Leu	Cys	Val	Tyr	Ala
145					150					155					160

<210> 2077

<211> 1410

<212> DNA

<213> Homo sapiens

<400> 2077

ncagagtgtt ttgagctatc tggatatcca aatgatgtga atactttcag aaaccaatgg
60
caaattgaac ccaactgttt gcgaattcgg cagcagtaaa gatctttttt ttttttttgt
120
tttttttttt tttttttttt ttttgctttc taaagtggct ttaatatcac acaagcggct
180
ctttggtcta cagtgagaga aaacagaggg agccaggaaa ggctccccgc tggcctctgg
240
agtccaggag ccttaggaag gctgaaacaa gccctgacca gcaggcttag ttgtcctgag
300
aagagccagt gaggccacct ggtccagttc accaggtttc ccagggaagc acaggcatct
360
ctgggtcccc gagcacagtg ccagggaaga caccceaat ccccatctga acaggccgag
420
ggcagcatgg gaaaggctca gactgcaggt tcatcccgca ggatggtaag gacacgtgct
480
cctccctcgc aagagcaggc ttgtgcacag cccggcacag ggccagccag ggcggcccct
540
gcggtgtgc agcgcttacc agggggagga gttagccat caggaccttt tccaagtgga
600
tctgctggtc cagcacagcc actcgcagct tgaggccgc cagggtctgc agctcctggg
660
tgctggagta gacaagcagc tgggnnggct ccatgcaggc tccgctctac cccacagga
720
cggcgaggct ccggggggcc tnnccccaca gacatggtct tgggtggctgt tccgccaccg
780
ctgcacgcag ctctgcagc ctgtgcagac actggccac catggcctgc agcccctcca
840
gcgtgagcag gcagcggtag tctgcattc agtccatggg ggctgctgag agctcctccc
900
tcatgcgcag tctcagcagc gagcaggcct tccgcaggcg ccccgccctc gcctccacct
960
ccacagcact gagcctgggc tggggcccgc ctgaagctgt ctgcatgttc tggaggaact
1020
gggttttggc agcggcgcca tccgtggaat cactggctctg tgtggaactg agctgggccc
1080
acaggctcga gttctgggaa gctgctttcc tgaatgccgc aggcagccgc agcaggtgcc
1140
ccttctcctt gagtgtgaag gcttctgggg cctgaggagc agcggatggg gccatttgc
1200
ggtccctgag gcccgcacca ggccctggggg ttcgggctcc catcccaaca cgggtcccat
1260
ccccactga cagcagccgg cgctcagggg ggcccttggc aggcaccgtg gtctggcgga
1320
ggcccttggg ggggtctcgtg tctgaagcat ggccaccagc ttggcctggg gaatgcggtg
1380
gggcggaggc tgctcgtgcca gaagaggtga
1410

<210> 2078

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2078

Gly His Leu Val Gln Phe Thr Arg Phe Pro Arg Glu Ala Gln Ala Ser
 1 5 10 15
 Leu Gly Pro Arg Ala Gln Cys Gln Gly Arg His Pro Gln Ser Pro Ser
 20 25 30
 Glu Gln Ala Glu Gly Ser Met Gly Lys Ala Gln Thr Ala Gly Ser Ser
 35 40 45
 Arg Arg Met Val Arg Thr Arg Ala Pro Pro Ser Gln Glu Gln Ala Cys
 50 55 60
 Ala Gln Pro Gly Thr Gly Pro Ala Arg Ala Ala Pro Ala Ala Val Gln
 65 70 75 80
 Arg Leu Pro Gly Gly Gly Val Gln Pro Ser Gly Pro Phe Pro Ser Gly
 85 90 95
 Ser Ala Gly Pro Ala Gln Pro Leu Ala Ala
 100 105

<210> 2079

<211> 565

<212> DNA

<213> Homo sapiens

<400> 2079

atttacctcg caaccgaccc tgatcgtgaa ggtgaaagca tcagctggca catccagcag
 60
 gtactggcgg tcaaataccta caaacgcatt accttcaacg agatcactct caagcgcgtt
 120
 gaagaggcac tggccaatcc tcgacaaatc gatctgaaca gaggtagcctc acaggaatgc
 180
 cggcgtgtgc ttgaccgctt ggtgggggtac ctgggtgaccc aagagttgcy gcgcctgatg
 240
 ggcaaaccta ctcccgctgg ccgcgttcaa tcaccgccc tgtttcttgt ggtcttgccg
 300
 gaacgcgaga tccgcaactt tcagggtgatc aatcactttg gcgtgctct gttctttgcc
 360
 gatgtaagtc ggggcaccac ttggtatgcc gaggggcaac cggtagccga ttccgcaagc
 420
 aagcacttcc cctatgttca ggatagcaac ctggctcagc acgtcgccgg cactcgaaat
 480
 gtggtcgtgg agtcctgcga ggatcgcaag gccgagcgtc atcctcctgc accattcatc
 540
 tcatccactc ttcaacaggc cgcca
 565

<210> 2080

<211> 188

<212> PRT

<213> Homo sapiens

<400> 2080

Ile Tyr Leu Ala Thr Asp Pro Asp Arg Glu Gly Glu Ser Ile Ser Trp
 1 5 10 15
 His Ile Gln Gln Val Leu Ala Val Lys Ser Tyr Lys Arg Ile Thr Phe
 20 25 30
 Asn Glu Ile Thr Leu Lys Arg Val Glu Glu Ala Leu Ala Asn Pro Arg


```

      35      40      45
Gln Ile Asp Leu Asn Arg Val Ala Ser Gln Glu Cys Arg Arg Val Leu
  50      55      60
Asp Arg Leu Val Gly Tyr Leu Val Thr Gln Glu Leu Arg Arg Leu Met
  65      70      75      80
Gly Lys Pro Thr Ser Ala Gly Arg Val Gln Ser Pro Ala Val Phe Leu
      85      90      95
Val Val Leu Arg Glu Arg Glu Ile Arg Asn Phe Gln Val Ile Asn His
      100      105      110
Phe Gly Val Arg Leu Phe Phe Ala Asp Val Ser Arg Gly Thr Thr Trp
      115      120      125
Tyr Ala Glu Trp Gln Pro Val Pro Asp Phe Ala Ser Lys His Phe Pro
      130      135      140
Tyr Val Gln Asp Ser Asn Leu Ala Gln His Val Ala Gly Thr Arg Asn
      145      150      155      160
Val Val Val Glu Ser Cys Glu Asp Arg Lys Ala Glu Arg His Pro Pro
      165      170      175
Ala Pro Phe Ile Ser Ser Thr Leu Gln Gln Ala Ala
      180      185

```

<210> 2081

<211> 319

<212> DNA

<213> Homo sapiens

<400> 2081

```

aagcttatgg aaaaacgggg atacggagag gagtatataa atcgctataa aatgatgaca
60
agggttccatc atcaacgggt tccactagta attttgggtgt gtggaactgc ctgtactgga
120
aaatcaacaa tcgctacaca acttgctcag aggctcaatt tgcctaattgt tttgcagacg
180
gacatgggtgt atgagctgct gcggacatca acagatgcgc cacttacttc agttcctgtg
240
tgggctcgcg attttaattc acctgaagag cttatcactg aattctgcag agaatgcaga
300
gttgtagcga agggtttgg
319

```

<210> 2082

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2082

```

Lys Leu Met Glu Lys Arg Gly Tyr Gly Glu Glu Tyr Ile Asn Arg Tyr
  1      5      10      15
Lys Met Met Thr Arg Phe His His Gln Arg Val Pro Leu Val Ile Leu
  20      25      30
Val Cys Gly Thr Ala Cys Thr Gly Lys Ser Thr Ile Ala Thr Gln Leu
  35      40      45
Ala Gln Arg Leu Asn Leu Pro Asn Val Leu Gln Thr Asp Met Val Tyr
  50      55      60
Glu Leu Leu Arg Thr Ser Thr Asp Ala Pro Leu Thr Ser Val Pro Val

```

```
<210> 2085
<211> 478
<212> DNA
<213> Homo sapiens
```

<400> 2085

nnggatccca aagaccgcga tattgccatg gtgttccaaa actatgccct ctacccgcac
 60
 atgactgtcg cgcacaacat gggttttgcc ctcaaactgg cgaaagtgga taagaaagaa
 120
 atccggcgtc gcgtggagga agccgcgaa ctctcgacc tcaccgacta tctggaccgc
 180
 aaaccaagg cactctccgg tggccagcgg cagcgcgtcg ccatggggcg cgctattgtt
 240
 cgttcccccc gcgtcttctt gatggacgag cctctttcta acctggatgc gcgtctgcgt
 300
 gtccgcaccc gcgccagat tgcggaactg cagcgcgcgc tgggcaccac caccgtttat
 360
 gtcacccatg accaggtgga ggctatgacg atgggggatc gtgtggctgt tctctgtgac
 420
 gggaaactgc agcaggtgga tactccacgt aatcttttcg accacccgcg taacgcgt
 478

<210> 2086

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2086

Xaa	Asp	Pro	Lys	Asp	Arg	Asp	Ile	Ala	Met	Val	Phe	Gln	Asn	Tyr	Ala	1	5	10	15
Leu	Tyr	Pro	His	Met	Thr	Val	Ala	Asp	Asn	Met	Gly	Phe	Ala	Leu	Lys	20	25	30	
Leu	Ala	Lys	Val	Asp	Lys	Lys	Glu	Ile	Arg	Arg	Arg	Val	Glu	Glu	Ala	35	40	45	
Ala	Glu	Leu	Leu	Asp	Leu	Thr	Asp	Tyr	Leu	Asp	Arg	Lys	Pro	Lys	Ala	50	55	60	
Leu	Ser	Gly	Gly	Gln	Arg	Gln	Arg	Val	Ala	Met	Gly	Arg	Ala	Ile	Val	65	70	75	80
Arg	Ser	Pro	Arg	Val	Phe	Leu	Met	Asp	Glu	Pro	Leu	Ser	Asn	Leu	Asp	85	90	95	
Ala	Arg	Leu	Arg	Val	Arg	Thr	Arg	Ala	Gln	Ile	Ala	Glu	Leu	Gln	Arg	100	105	110	
Arg	Leu	Gly	Thr	Thr	Thr	Val	Tyr	Val	Thr	His	Asp	Gln	Val	Glu	Ala	115	120	125	
Met	Thr	Met	Gly	Asp	Arg	Val	Ala	Val	Leu	Cys	Ala	Gly	Lys	Leu	Gln	130	135	140	
Gln	Val	Asp	Thr	Pro	Arg	Asn	Leu	Phe	Asp	His	Pro	Ala	Asn	Ala	145	150	155		

<210> 2087

<211> 731

<212> DNA

<213> Homo sapiens

<400> 2087

gataattctc tacacggcat gagctgggga cgtacccccc ttgccaacgt cacctcacgg
 60

tcgtaccgtg gtgattagca gctagccgag gcgctagccg ccatataaga ttcccaaatt
 120
 aaaagaaaa gcattgcgtc ggccaagaat tgctgtcgct gctgcaacgg ctactgcgct
 180
 ggtcggatca atcgcagcaa tcacccccctc ccccgaggcag aagctaactc caataggcca
 240
 cgctcggtag ctcaagccgc tatcgccacg gatggaaagg ggataatcaa caaggactgc
 300
 cgtgatgcag tcatcaacga tgcaaagctg cgtgccgcga ttgccggtgc gttgggtaag
 360
 gctggattta gttccgcga cgcggtggct ctagcgccgc gtattgccag agaaatggca
 420
 aaagagggcg tcctcctcat caaccaccac aagctaaagg ctctcatcgg agcccagggtg
 480
 ggtctgtca ctgatgcga gatccagcgt gctgccgctg cagtggacct cggcatcaaa
 540
 gccactctag ctgcgacaat cattcccaac gcgctgcatt cagcggcatt caaggatgcg
 600
 gtggtcgcaa atcttgtcgc cgccgggtctg acaagaagtt ggcaaaggct acggctgtcg
 660
 ccattgccgc aactgcgctc aatcccgcgc tcggggccgat cgcaaagact gaggccatta
 720
 aggctgagat c
 731

<210> 2088

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2088

Met	Ala	Lys	Glu	Gly	Val	Leu	Leu	Ile	Asn	His	His	Lys	Leu	Lys	Ala
1				5					10					15	
Leu	Ile	Gly	Ala	Gln	Val	Gly	Leu	Leu	Thr	Asp	Ala	Lys	Ile	Gln	Arg
			20					25					30		
Ala	Ala	Ala	Ala	Val	Asp	Leu	Gly	Ile	Lys	Ala	Thr	Leu	Ala	Ala	Thr
			35				40					45			
Ile	Ile	Pro	Asn	Ala	Leu	His	Ser	Ala	Ala	Phe	Lys	Asp	Ala	Val	Val
		50				55					60				
Ala	Asn	Leu	Val	Ala	Ala	Gly	Leu	Thr	Arg	Ser	Trp	Gln	Arg	Leu	Arg
65				70					75					80	
Leu	Ser	Pro	Leu	Pro	Gln	Leu	Arg	Ser	Ile	Pro	Leu	Ser	Gly	Arg	Ser
				85				90					95		
Gln	Arg	Leu	Arg	Pro	Leu	Arg	Leu	Arg							
				100				105							

<210> 2089

<211> 315

<212> DNA

<213> Homo sapiens

<400> 2089

accggtgtgg accaggetca gctgcgcgac gccatgtttt cctaccttcc ccaccacaag
 60

ctcggggaat tcgacatcga tctgttgctg gaccatcgcg attcccgta gccatcatc
 120
 ttcgacaccg accacttcga ggggtacgag cgccccgcc tcgtgctgca cgaagtcacc
 180
 gatcaacttg gccaaagcgtt ccttgatttg gaaggcccag agccggctct cggctgggaa
 240
 tcgttggtgg cgtctctcac gagtcttgtc gactctatgg ggatccgtct gaccggcatt
 300
 accgattcga tcccc
 315

<210> 2090

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2090

Thr	Gly	Val	Asp	Gln	Ala	Gln	Leu	Arg	Asp	Ala	Met	Phe	Ser	Tyr	Leu
1			5					10					15		
Pro	His	His	Lys	Leu	Gly	Glu	Phe	Asp	Ile	Asp	Leu	Leu	Leu	Asp	His
			20					25				30			
Arg	Asp	Ser	Arg	Gln	Pro	Ile	Ile	Phe	Asp	Thr	Asp	His	Phe	Glu	Gly
		35				40					45				
Tyr	Glu	Arg	Pro	Arg	Leu	Val	Leu	His	Glu	Val	Thr	Asp	Gln	Leu	Gly
	50				55				60						
Gln	Ala	Phe	Leu	Val	Leu	Glu	Gly	Pro	Glu	Pro	Ala	Leu	Gly	Trp	Glu
65				70					75				80		
Ser	Leu	Val	Ala	Ser	Leu	Thr	Ser	Leu	Val	Asp	Ser	Met	Gly	Ile	Arg
			85					90				95			
Leu	Thr	Gly	Ile	Thr	Asp	Ser	Ile	Pro							
			100				105								

<210> 2091

<211> 322

<212> DNA

<213> Homo sapiens

<400> 2091

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 60
 tgtgtccctg tccagttctg tnnctgtgtg tgcgcgcac tctctctgtg tctctgttng
 120
 agtctctgtc tcttttctct ctgtctctct ctgtgtctct gccattttg gtctctgtct
 180
 tctttctctct gtgtgtctct ccatttctgt ctctcttctct ctgtctctct ccatttctgt
 240
 ctctgtctct tttctctctg tgtgtctctt ttgtctctct gtttctctgc gtgtctctgt
 300
 ccatttctgt cccttcacgc gt
 322

<210> 2092

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2092

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Thr Leu Val His Cys Leu Cys Leu Cys Val Phe Leu Ser Val Ser Leu
 1           5           10           15
Cys Leu Cys Leu Cys Val Pro Val Gln Phe Cys Xaa Cys Val Cys Ala
      20           25           30
His Leu Ser Leu Cys Leu Cys Xaa Ser Leu Cys Leu Phe Cys Leu Cys
      35           40           45
Leu Ser Leu Cys Leu Cys Pro Phe Trp Ser Leu Leu Ser Phe Leu Cys
      50           55           60
Val Ser Leu His Phe Cys Leu Ser Ser Ser Val Ser Leu His Phe Cys
      65           70           75           80
Leu Cys Ser Phe Ser Leu Cys Val Ser Leu Leu Ser Leu Cys Phe Ser
      85           90           95
Ala Cys Leu Cys Pro Phe Leu Ser Leu His Ala
      100           105

```

<210> 2093

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2093

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gccggcggtca tgcaaacgat caaggtggcg caatttcgcc tctgccatag tcgaaaaatg
60
tttgtggtgg cctaccgcgc agagaccag gagatggtgc tcgatgcgca taaccgcgcc
120
tttgcgttct ttggcggcgt accgcagcgg gttatctacg acaaccttaa aaccgcagtg
180
gatgcgatct tggtcggcaa ggatcgaatc ttcaaccggc gcttctctggc gttggctaata
240
cattacctgt ttgaacctgt agcctgtacg cctgctgctg gctgggagaa gggccaagtt
300
gagaatcaag ttcgcaacat acgc
324

```

<210> 2094

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2094

```

Ala Gly Val Met Gln Thr Ile Lys Val Ala Gln Phe Arg Leu Cys His
 1           5           10           15
Ser Arg Lys Met Phe Val Val Ala Tyr Pro Arg Glu Thr Gln Glu Met
      20           25           30
Val Leu Asp Ala His Asn Arg Ala Phe Ala Phe Gly Gly Val Pro
      35           40           45
Gln Arg Val Ile Tyr Asp Asn Leu Lys Thr Ala Val Asp Ala Ile Leu
      50           55           60
Val Gly Lys Asp Arg Ile Phe Asn Arg Arg Phe Leu Ala Leu Ala Asn
      65           70           75           80
His Tyr Leu Phe Glu Pro Val Ala Cys Thr Pro Ala Ala Gly Trp Glu

```

85 90 95
 Lys Gly Gln Val Glu Asn Gln Val Arg Asn Ile Arg
 100 105

<210> 2095
 <211> 402
 <212> DNA
 <213> Homo sapiens

<400> 2095
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 60
 accctgcccc ccgcccga tcttctgctt aaacaattcc atattgtgga tgttgcccg
 120
 cgcgtggtgg gcgtgggttc agtgggcacc cactccctgg tactgctact gtccggcccc
 180
 aatgatgaac ctcttgctct gcaagtgaag gaagccctcc ccagtgtcct caccacccat
 240
 gggaaactgc cggatgcttt ttcggaactg tccgctgggg actcctccgg gctcctcccc
 300
 gataatcttg ataagcatat taaagccggc aatggctacc ggggtggtggc gtgccagcag
 360
 attctgcagg cccactcgga tccgctgctg ggggtggacgc gt
 402

<210> 2096
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 2096
 Pro Val Thr Asp Gln Glu Glu Ala Asp Asn Met Ile Ala Ser Phe Asp
 1 5 10 15
 Thr Tyr Val Arg Thr Leu Pro Pro Ala Ala Asn Leu Leu Leu Lys Gln
 20 25 30
 Phe His Ile Val Asp Val Ala Arg Arg Val Val Gly Val Gly Ser Val
 35 40 45
 Gly Thr His Ser Leu Val Leu Leu Leu Ser Gly Pro Asn Asp Glu Pro
 50 55 60
 Leu Val Leu Gln Val Lys Glu Ala Leu Pro Ser Val Leu Thr Thr His
 65 70 75 80
 Gly Lys Leu Pro Asp Ala Phe Ser Glu Leu Ser Ala Gly Asp Ser Ser
 85 90 95
 Gly Leu Leu Pro Asp Asn Leu Asp Lys His Ile Lys Ala Gly Asn Gly
 100 105 110
 Tyr Arg Val Val Ala Cys Gln Gln Ile Leu Gln Ala His Ser Asp Pro
 115 120 125
 Leu Leu Gly Trp Thr Arg
 130

<210> 2097
 <211> 641
 <212> DNA
 <213> Homo sapiens

<400> 2097

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 120
 gccatgagca aggaggaggc cgaccaggta ctgggcgtgc agctggggct gtctgtccgc
 180
 caccgcctc cagcctcac ttcaggctcc ctcccagcca ggcgtgggcc tggccctcac
 240
 tgtcgtgct ccacatgctg tcaactgtct cctccccagt cctgcctcat cctcacnccg
 300
 ccgtccctct gcgtgtcact ctctgcctgt cctcactggt tcagggaccc ccagcctctc
 360
 tttattcggc tctatctgac cctggctctg cctctgactc tgccctctggc cctccccgctc
 420
 atgccccca cactctctct cccccagccc ccgtcctgcg gccccgagga cgacgcccag
 480
 ctccagctgg cccttagttt gagccgagaa gagcatgata aggtcagagc agcctccctg
 540
 tccctgcccc tgccaggggc tccctcaga ccagccccgt cgccccctcc taagtcaccc
 600
 cccaccatcc tgctggggcc gaagcccaca ggctcacgcg t
 641

<210> 2098

<211> 213

<212> PRT

<213> Homo sapiens

<400> 2098

Xaa Phe Leu Thr Arg Pro Pro Ala Ser Ser Ala Ala Val Gly Ser Gly
 1 5 10 15
 Pro Pro Pro Glu Ala Glu Gln Ala Trp Pro Gln Ser Ser Gly Glu Glu
 20 25 30
 Glu Leu Gln Leu Gln Leu Ala Leu Ala Met Ser Lys Glu Glu Ala Asp
 35 40 45
 Gln Val Leu Gly Val Gln Leu Gly Leu Ser Val Arg His Pro Pro Pro
 50 55 60
 Arg Leu Thr Ser Gly Ser Leu Pro Ala Arg Arg Gly Pro Gly Pro His
 65 70 75 80
 Cys Arg Cys Ser Thr Cys Cys His Ser Ser Pro Pro Gln Ser Cys Leu
 85 90 95
 Ile Leu Thr Pro Pro Ser Leu Cys Val Ser Leu Ser Ala Cys Pro His
 100 105 110
 Trp Phe Arg Asp Pro Gln Pro Leu Phe Ile Arg Leu Tyr Leu Thr Leu
 115 120 125
 Ala Leu Pro Leu Thr Leu Pro Leu Ala Pro Pro Val Met Pro Leu Thr
 130 135 140
 Leu Ser Leu Pro Gln Pro Pro Ser Cys Gly Pro Glu Asp Asp Ala Gln
 145 150 155 160
 Leu Gln Leu Ala Leu Ser Leu Ser Arg Glu Glu His Asp Lys Val Arg
 165 170 175
 Ala Ala Ser Leu Ser Leu Pro Leu Pro Gly Ala Pro Leu Arg Pro Ala


```

      180      185      190
Pro Ser Pro Leu Pro Lys Ser Pro Pro Thr Ile Leu Leu Gly Pro Lys
      195      200      205
Pro Thr Gly Ser Arg
      210

```

<210> 2099
 <211> 347
 <212> DNA
 <213> Homo sapiens

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<400> 2099
acgcgtgtgc cctgtcccct gccagacatg gacagcacct gcccacaggg gtgctcagtg
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gaggcagtgc ccaggggtgc tgtgcccatg cgtgtaccct gtcctctgcc agacgcggac
120
agcacctgcc caccgggtgc tcagtggagg cagtgccag ggctgctgtg cccacgtgtg
180
tgccctcaga catccctccc cagacacttg ctgcatgacc caggaggtgg caggcagtgg
240
cagtattctg ttcaggtgag ctgagaggtg gcaggtgcct ggctgcggcc ctgcctcact
300
ccgacagcct ctgcctccag tccactggct catccacat ggctga
347

```

<210> 2100
 <211> 106
 <212> PRT
 <213> Homo sapiens

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<400> 2100
Met Asp Ser Thr Cys Pro Gln Gly Cys Ser Val Glu Ala Val Pro Arg
 1          5          10          15
Ala Ala Val Pro Met Arg Val Pro Cys Pro Leu Pro Asp Ala Asp Ser
      20          25          30
Thr Cys Pro Arg Gly Ala Gln Trp Arg Gln Cys Pro Gly Leu Leu Cys
      35          40          45
Pro Arg Val Cys Pro Gln Thr Ser Leu Pro Arg His Leu Leu His Asp
      50          55          60
Pro Gly Gly Gly Arg Gln Trp Gln Tyr Ser Val Gln Val Ser Ser Glu
65          70          75          80
Val Ala Gly Ala Trp Leu Arg Pro Cys Leu Thr Pro Thr Ala Ser Ala
      85          90          95
Ser Ser Pro Leu Ala His Pro Thr Trp Pro
      100          105

```

<210> 2101
 <211> 549
 <212> DNA
 <213> Homo sapiens

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<400> 2101
ctctctccga ccgcgttgac ggtccagccg gtccgcacgc cgtcatcgga atcggcatca
60

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acgtttcgat ggggcgtgac gaattgcccc tgccgacggc gacctctctg gctctgtgtg
 120
 ggttgaacca cgacaagaat gagttgctgg ccagccttct catccacctt gacgagctat
 180
 taacagtgtg gttggagacc ggaacggtgc gggatcagta tgtggcccg tgtgacacca
 240
 ttggtactcc ggtccgtctg accttcgacc cagaaatcgt gggtggtggt gagggggcca
 300
 ttgagggcat cgggtgacgac gttgacgttg atggcgctat cgtggtggaa acttctgacg
 360
 ggcgtcgcag tttcaacgct gctgacgttc atcatttgcg aaccagggtga gttccgctac
 420
 ggcgtcctga gcgttccac catctagact gctgactatg acgaccaca ttttggccct
 480
 tgggtggtggc ggtttctcga tgtcgaaccg cggtgagcct accgctctcg accgtcacat
 540
 ccctgacct
 549

<210> 2102

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2102

Met	Gly	Arg	Asp	Glu	Leu	Pro	Leu	Pro	Thr	Ala	Thr	Ser	Leu	Ala	Leu
1				5					10				15		
Cys	Gly	Leu	Asn	His	Asp	Lys	Asn	Glu	Leu	Leu	Ala	Ser	Leu	Leu	Ile
			20					25					30		
His	Leu	Asp	Glu	Leu	Leu	Thr	Val	Trp	Leu	Glu	Thr	Gly	Thr	Val	Arg
		35					40					45			
Asp	Gln	Tyr	Val	Ala	Arg	Cys	Asp	Thr	Ile	Gly	Thr	Pro	Val	Arg	Leu
	50					55				60					
Thr	Phe	Asp	Pro	Glu	Ile	Val	Gly	Gly	Gly	Glu	Gly	Ala	Ile	Glu	Gly
65				70						75				80	
Ile	Gly	Val	Asp	Val	Asp	Val	Asp	Gly	Ala	Ile	Val	Val	Glu	Thr	Ser
			85					90					95		
Asp	Gly	Arg	Arg	Ser	Phe	Asn	Ala	Ala	Asp	Val	His	His	Leu	Arg	Thr
			100					105					110		

Arg

<210> 2103

<211> 459

<212> DNA

<213> Homo sapiens

<400> 2103

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 120
 tgggaggggg acgcatatcg gtacgaccag gttggtatgg aaatcaaagg gaatgacgtc
 180

ggtatcgctg gatgcggagc ggctcgggtgc cggggttcgg ctgtgatggc ggccatgggt
 240
 gcgaccgtgc gtgtcttcga cccgtgggcc actcctgatt cttttccagc tggcgtgatg
 300
 gcatgtgatg atctcgatga gggtctgagg ctcagccgca tcctcactct ccacgctcgt
 360
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 420
 tccgtcctcg tcaactgtgc ccgtggctcg ctggctcgac
 459

<210> 2104

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2104

Xaa	Arg	Val	Thr	Tyr	Thr	Pro	Gly	Arg	Asn	Ala	Thr	Ala	Thr	Ala	Glu
1				5					10					15	
His	Thr	Ile	Ala	Met	Ile	Met	Ala	Ala	Val	Arg	Gln	Ile	Pro	Ala	His
			20					25					30		
His	Glu	Leu	Leu	Ala	Ser	Gly	Val	Trp	Glu	Gly	Asp	Ala	Tyr	Arg	Tyr
		35					40					45			
Asp	Gln	Val	Gly	Met	Glu	Ile	Lys	Gly	Asn	Asp	Val	Gly	Ile	Val	Gly
		50				55					60				
Cys	Gly	Ala	Val	Gly	Cys	Arg	Val	Ala	Ala	Val	Met	Ala	Ala	Met	Gly
65					70					75				80	
Ala	Thr	Val	Arg	Val	Phe	Asp	Pro	Trp	Ala	Thr	Pro	Asp	Ser	Phe	Pro
				85					90					95	
Ala	Gly	Val	Met	Ala	Cys	Asp	Asp	Leu	Asp	Glu	Val	Leu	Arg	Leu	Ser
			100					105					110		
Arg	Ile	Leu	Thr	Leu	His	Ala	Arg	Ala	Asn	Glu	Asp	Asn	Arg	His	Met
		115					120						125		
Ile	Gly	Val	Glu	Gln	Leu	Ala	Glu	Met	Pro	Asp	Gly	Ser	Val	Leu	Val
		130				135							140		
Asn	Cys	Ala	Arg	Gly	Ser	Leu	Val	Asp							
145						150									

<210> 2105

<211> 4057

<212> DNA

<213> Homo sapiens

<400> 2105

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 120
 cccctatatg gctccagtcg gttttggggg gggcagctaa gtgggggagg gggaacacaa
 180
 aagtttgggc aaaacattaa cctgacaaaag cttgattccg gaaaaaaatc cctcaagagc
 240
 gcaaggccag cttagccaac tggcagctga gtggaaaggt tcagtcctct cgggcagctc
 300

cggtggcacc tagaggggag aggggtgcagg ctttgaagcc agaaagacat ggatgcaagt
360
cttactttgc ttcttctgtg taccagttgg cctgacctta ggaaatgtta tttaatctct
420
ctccagttgt tttccctgga gaaagccctg tcagcctgag gatccaagac gcgtacgtaa
480
agtgtctgat ttcagccagt gtcccttctt gtcccttctt ggggtgtgtg tcggttgccc
540
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600
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660
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720
ctagaagctc cgagttctct tactcccagc agtgaactca gcagcccagg ccaaagttag
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840
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900
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960
ctggctcctg tggcccacag tgatattccc ccaagcctgg acagccctct gggtctcggg
1020
acagcagcca cggttctgca gcagggcagc ttcagtgtgg atgacgtgca gactgtgagt
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1200
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1320
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1380
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1560
ccttaaccca tctgagcctt aaattctcat ttatttcttg cataaggaga tttggctaaa
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1680
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1740
ctagaagagg agtcgagaca taagccacct tcagaggttc aatggaaact ttaaaacat
1800
accaaactct tttttaaaat tagaattaac aagaaaaaaa aaagggtggg gtttatgagc
1860
cttagttctt ggaggattat aagagtactt cccagtttt gaggctggac agttaatata
1920

ctttatatca attatacatt taatataatt taatttaaaa taatttaaag attccttagga
1980
gatagtctga ctttcctgac ctagatggga atgatacagat agggattttt tttgtggcac
2040
aggctaaatt tgatgggtgac atttatattg ttgagaatgt tacatcttat tttaccacaa
2100
cttttaaaaa atgttacatc ttttgcagta ggatcagttg tgaggcacat agtagctgag
2160
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2220
atttctgggtg tcttgcttgt cgggtggcaga gccatgcttg ccggcatttg cttaggtggc
2280
catagtagtt gctaagtgtg caggtgactg ggcagggatg ggaggtggcc acaggtcaga
2340
gacaagtgtc cagtcagtcc ctggtgccag gactgtgtgc ctcggtgcct tgggaaatgg
2400
aagctccctg gtgcagctgc agctgtgggt ggaggtagag aagccagcaa gaccttggtc
2460
ttaaccccggt gttcattttc ttgctagctg tgtgacgttg ggctacctcg cttctctgag
2520
tacaaatggt gtgtggtgaa tgggtcccag gtatgctacg agctttgagg gctgctcttt
2580
ttctcttcat agcgataagt gttaaactgt ctttcttagg aaacgttcac agacttgcaa
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2700
tcattattat ttttgtgtaa gactttgaca aagtatagcc cctgccacca gagcagcctg
2760
tacagtgggt ctctaagggt ggacctgccc cgggcctgcc atgcacgtgt gtgaaacagc
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 3900
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<210> 2106

<211> 240

<212> PRT

<213> Homo sapiens

<400> 2106

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			20					25					30		
Gln	Ser	Glu	Leu	Thr	Asn	Met	Asp	Leu	Ala	Ala	Leu	Phe	Ser	Asp	Thr
		35				40					45				
Pro	Ala	Asn	Ala	Ser	Gly	Ser	Ala	Gly	Gly	Ser	Asp	Glu	Ala	Leu	Asn
	50					55				60					
Ser	Gly	Ile	Leu	Thr	Ile	Asp	Val	Thr	Ser	Val	Ser	Ser	Ser	Leu	Gly
65				70					75					80	
Gly	Asn	Leu	Pro	Ala	Asn	Asn	Ser	Ser	Leu	Gly	Pro	Met	Glu	Pro	Leu
				85					90					95	
Val	Leu	Val	Ala	His	Ser	Asp	Ile	Pro	Pro	Ser	Leu	Asp	Ser	Pro	Leu
		100						105					110		
Val	Leu	Gly	Thr	Ala	Ala	Thr	Val	Leu	Gln	Gln	Gly	Ser	Phe	Ser	Val
		115					120					125			
Asp	Asp	Val	Gln	Thr	Val	Ser	Ala	Gly	Ala	Leu	Gly	Cys	Leu	Val	Ala
	130					135					140				
Leu	Pro	Met	Lys	Asn	Leu	Ser	Asp	Asp	Pro	Leu	Ala	Leu	Thr	Ser	Asn
145				150					155					160	
Ser	Asn	Leu	Ala	Ala	His	Ile	Thr	Thr	Pro	Thr	Ser	Ser	Ser	Thr	Pro
				165					170					175	
Arg	Glu	Asn	Ala	Ser	Val	Pro	Glu	Leu	Leu	Ala	Pro	Ile	Lys	Val	Glu
			180					185					190		
Pro	Asp	Ser	Pro	Ser	Arg	Pro	Gly	Ala	Val	Gly	Gln	Gln	Glu	Gly	Ser
	195						200					205			
His	Gly	Leu	Pro	Gln	Ser	Thr	Leu	Pro	Ser	Pro	Ala	Glu	Gln	His	Gly
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Ala	Gln	Asp	Thr	Glu	Leu	Ser	Ala	Gly	Thr	Gly	Asn	Phe	Tyr	Leu	Val

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120
taccaagcgt ccagtgaggc tccccagcg aaacggagga acgaaacttc atttctccca
180
gccaagaaaa ctagtgttaa agaaactcag aggactttta aggggaacgc acaaaaaatg
240
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ttttctccaa agaagcattc ggtagcaca agtgatagaa accaggagga gagacagtgc
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 360
 gtaaagcagg tgcaagaaaa agtggttact tcagctgctt ttcattgagct gggcctccac
 420
 ccacatttaa tttccacaat aaatacggtc ttaaaaatgt ctagtatgac cagtgttcag
 480
 aagcaaagta ttctgtgtt gctggaaggc agagatgctc tcgtgagatc ccagacgggc
 540
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 600
 aaaatacagc gcagtgatgg cccctatgcc ctgggtgctcg tgccaacgag agaggtaagc
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<210> 2110

<211> 233

<212> PRT

<213> Homo sapiens

<400> 2110

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 20 25 30
 Gln Ala Lys Ala Thr Lys Arg Lys Tyr Gln Ala Ser Ser Glu Ala Pro
 35 40 45
 Pro Ala Lys Arg Arg Asn Glu Thr Ser Phe Leu Pro Ala Lys Lys Thr
 50 55 60
 Ser Val Lys Glu Thr Gln Arg Thr Phe Lys Gly Asn Ala Gln Lys Met
 65 70 75 80
 Phe Ser Pro Lys Lys His Ser Val Ser Thr Ser Asp Arg Asn Gln Glu
 85 90 95
 Glu Arg Gln Cys Ile Lys Thr Ser Ser Leu Phe Lys Asn Asn Pro Asp
 100 105 110
 Ile Pro Glu Leu His Arg Pro Val Val Lys Gln Val Gln Glu Lys Val
 115 120 125
 Phe Thr Ser Ala Ala Phe His Glu Leu Gly Leu His Pro His Leu Ile
 130 135 140
 Ser Thr Ile Asn Thr Val Leu Lys Met Ser Ser Met Thr Ser Val Gln
 145 150 155 160
 Lys Gln Ser Ile Pro Val Leu Leu Glu Gly Arg Asp Ala Leu Val Arg
 165 170 175
 Ser Gln Thr Gly Ser Gly Lys Ile Leu Ala Tyr Cys Ile Pro Val Val
 180 185 190
 Gln Ser Leu Gln Ala Met Glu Ser Lys Ile Gln Arg Ser Asp Gly Pro
 195 200 205
 Tyr Ala Leu Val Leu Val Pro Thr Arg Glu Val Ser Arg Leu Pro Phe
 210 215 220
 Gly Thr Ser Phe Lys His Met Leu Ser
 225 230

<210> 2111

<211> 339

<212> DNA

<213> Homo sapiens

<400> 2111

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120
gccgagctgg tggccctggc tgagctgttc atgccaatca agctgggtgcc gaagcaattt
180
gaaggcctgg ttgagcgtgt gcgcagtgtt cttgagcgtc tgcgtgccca agagcgcgca
240
atcatgcagc tctgcgtacg tgatgcacgc atgccgctgt ccgacttcct gcgccagttt
300
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339

<210> 2112

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2112

Thr	Arg	Cys	Ala	Gly	Pro	Asp	Pro	Ile	Ile	Ala	Ala	Gln	Arg	Phe	Gly
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Ala	Val	Ser	Asp	Gln	Met	Glu	Ile	Thr	Arg	Lys	Ala	Leu	Lys	Lys	His
			20					25				30			
Gly	Arg	Gly	Asn	Lys	Leu	Ala	Ile	Ala	Glu	Leu	Val	Ala	Leu	Ala	Glu
			35					40				45			
Leu	Phe	Met	Pro	Ile	Lys	Leu	Val	Pro	Lys	Gln	Phe	Glu	Gly	Leu	Val
			50			55				60					
Glu	Arg	Val	Arg	Ser	Ala	Leu	Glu	Arg	Leu	Arg	Ala	Gln	Glu	Arg	Ala
					70					75					80
Ile	Met	Gln	Leu	Cys	Val	Arg	Asp	Ala	Arg	Met	Pro	Arg	Ala	Asp	Phe
					85					90					95
Leu	Arg	Gln	Phe	Pro	Gly	Asn	Glu	Val	Asp	Glu	Ser	Trp	Thr	Asp	Ala
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Leu															

<210> 2113

<211> 2329

<212> DNA

<213> Homo sapiens

<400> 2113

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120
aaagggaagt tgacattaga tagcagtttt aacatcgcca gccagcttc ccaggcctgg
180

at tt t t g c a c t t c t g t c a a a a a c t g a g a a a c c a a c a t t t c t t t a c c a g a c t g a t g a a c a g
240
g a c t t c a c c a g c t g c t t c a t t g a g a c a t t c a a c a g t g g a t g g a a a a c c a g g a c t g t g a t
300
g a g c c t g c c c t g t a c c c a t g c t g c a g c c a c t g g a g c t t c c c c t a c a a g c a a g a g a t t t t t
360
g a a c t g t g c a t c a a g a g a g c t a t c a t g g a g c t g g a a a g g a g t a c a g g g t a c c a t t t g g a t
420
a g c a a a a c c c c a g g g c c g a g g t t t g a t a t c a a t g a t a c t a t c a g g g c a g t g g t g t t a g a g
480
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540
g t g g a c t c g t g g a t a t c c a g t g a g c t g a g t t c g g c c c c t g a a g g c c t c a g c a a t g g t t g g
600
t t t g t c a g c a a t c t g g a g t t c t a t g a c c t c c a g g a t a g c c t c t c c g a t g g c a c c c t c a t t
660
g c c a t g g g g c t g t c a g t t g c t g t t g c a t t t a g c g t g a t g c t g c t g a c a a c t t g g a a c a t c
720
a t c a t a a g c c t t t a t g c c a t c a t t t c a a t t g c t g g a a c g a t a t t t t g t c a c t g t t g g t t c t
780
c t t g t c c t g c t g g g c t g g g a g c t c a a t g t g t t g g a a t c t g t c a c c a t t t c g g t t g c c g t c
840
g g c t t g t c t g t a g a c t t t g c c g t c a t t a t g g g g t t g c c t a c c g c t t g g c t c c a g a t c c c
900
g a c c g a g a a g g c a a a g t g a t c t t c t c t c t g a g t c g c t g g g c t c t g c g a t g g c c a t g g c t
960
g c c c t g a c c a c c t t c g t g g c a g g g g c c a t g a t g a t t c c c t c c a c a g t t c t a g c t t a c a c c
1020
c a g c t g g g c a c c t t c a t g a t g c t c a t c a t g t g a t c a g t t g g g c t t t c g c c a c c t t c t t t
1080
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1140
a a a a a a c t a c a g t g c a g t g c c t t t c c c a t g c c t t g t c t a c a a g t c c c a g t g a c a a g g g a
1200
c a a a g c a a a a c a c a t a c c a t a a a t g c t t a t c a t t t a g a t c c a g g g g c c c a a a a t c t g a a
1260
c t g g a g c a t g a g t t t t a t g a a t a g a a c c t c t g g c t t c c c a c a g c t g c a c t g c c c c t g a g
1320
a a g a c c a c t t a t g a a g a g a c c c a c a t c t g c t c t g a a t t t t t c a a c a g c c a a g c a a a g a a t
1380
t t a g g g a t g c c t g t g c a t g c a g c t t a c a a c a g t g a a c t c a g c a a a a g c a c t g a a a g t g a c
1440
a c t g g c t c t g c c t t g t t a c a g c c c c t c t t g a a c a g c a t a c c g t g t g t c a c t t c t t c t c t
1500
c t g a a t c a g a g a t g a g c t g c c c c c a t g c c t a c a a a c a c t t g a a c t a t g g c c c a c a c t c t
1560
t g c c a g c a g a t g g g g g a c t g c t t g t g c c a c a g t g c t c t c t a c c a c t a g c a g c t t t g t c
1620
c a g a t c c a a a a c g g g c g t g g c a c c t c t g a a g g c c a c a c c a a g c t g t c g a g g g c t t t g t g
1680
c a c c c c a t c a c g c a c a t c c a c c a c t g t c c c t g c c t g c a g g c a g a g t a a a g c c a g c c g g a
1740
a t g c a g a a t t c t c t g c c t a g g a a t t t t t t c c t c c a c c c a g t g c a g c a c a t t c a g g c c c a a
1800

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 1920
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 1980
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 2040
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 2160
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 2220
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 2280
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<210> 2114

<211> 758

<212> PRT

<213> Homo sapiens

<400> 2114

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			20					25					30		
Gly	Asn	Pro	Leu	Asn	Pro	Lys	Ser	Lys	Gly	Lys	Leu	Thr	Leu	Asp	Ser
		35					40				45				
Ser	Phe	Asn	Ile	Ala	Ser	Pro	Ala	Ser	Gln	Ala	Trp	Ile	Leu	His	Phe
	50					55				60					
Cys	Gln	Lys	Leu	Arg	Asn	Gln	Thr	Phe	Phe	Tyr	Gln	Thr	Asp	Glu	Gln
65					70					75				80	
Asp	Phe	Thr	Ser	Cys	Phe	Ile	Glu	Thr	Phe	Lys	Gln	Trp	Met	Glu	Asn
				85					90					95	
Gln	Asp	Cys	Asp	Glu	Pro	Ala	Leu	Tyr	Pro	Cys	Cys	Ser	His	Trp	Ser
			100					105					110		
Phe	Pro	Tyr	Lys	Gln	Glu	Ile	Phe	Glu	Leu	Cys	Ile	Lys	Arg	Ala	Ile
		115					120					125			
Met	Glu	Leu	Glu	Arg	Ser	Thr	Gly	Tyr	His	Leu	Asp	Ser	Lys	Thr	Pro
		130				135					140				
Gly	Pro	Arg	Phe	Asp	Ile	Asn	Asp	Thr	Ile	Arg	Ala	Val	Val	Leu	Glu
145					150					155				160	
Phe	Gln	Ser	Thr	Tyr	Leu	Phe	Thr	Leu	Ala	Tyr	Glu	Lys	Met	His	Gln
			165						170					175	
Phe	Tyr	Lys	Glu	Val	Asp	Ser	Trp	Ile	Ser	Ser	Glu	Leu	Ser	Ser	Ala
			180					185					190		
Pro	Glu	Gly	Leu	Ser	Asn	Gly	Trp	Phe	Val	Ser	Asn	Leu	Glu	Phe	Tyr
		195					200					205			
Asp	Leu	Gln	Asp	Ser	Leu	Ser	Asp	Gly	Thr	Leu	Ile	Ala	Met	Gly	Leu
		210				215					220				
Ser	Val	Ala	Val	Ala	Phe	Ser	Val	Met	Leu	Leu	Thr	Thr	Trp	Asn	Ile

1584

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Val Glu Leu Ser Leu Ser Gln Thr Asp Ala Ser Val Asn Ser Glu His
        675          680          685
Phe Asn Gln Asn Glu Pro Lys Val Leu Phe Asn His Leu Met Gly Glu
        690          695          700
Ala Gly Cys Arg Ser Cys Pro Asn Asn Ser Gln Ser Cys Gly Arg Ile
705          710          715          720
Val Arg Val Lys Cys Asn Ser Val Asp Cys Gln Met Pro Asn Met Glu
        725          730          735
Ala Asn Val Pro Ala Val Leu Thr His Ser Glu Leu Ser Gly Glu Ser
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Leu Leu Ile Lys Thr Leu
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<210> 2115
 <211> 461
 <212> DNA
 <213> Homo sapiens

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<400> 2115
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120
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180
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360
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420
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461

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<210> 2116
 <211> 146
 <212> PRT
 <213> Homo sapiens

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<400> 2116
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Gly Asn Pro Val Gly Ser Arg Ser Ser Glu Pro Arg Arg Ala Glu Ala
20          25          30
Gly Gly Pro Pro Ala Pro Ala Ala His Arg Leu Gly Met Glu Met Pro
35          40          45
Ser Pro Gly Ser Ser Arg Gln Arg Thr Arg Glu Met Thr Thr Glu Arg
50          55          60
His Thr Pro Ala Pro Ser His Ser Ser Pro Gln Ile Ser Pro Ser Asp
65          70          75          80
Ala Ala Val Arg Phe Asn Val Ser Phe Leu Phe Arg Ala Gly Gly Cys

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85 90 95
 Gly Leu Gly Gly Leu Gln Gly Pro Lys Thr Ser Arg Trp Ala Gln Glu
 100 105 110
 Gly Asp Arg His Pro Pro Phe Gln Ile Leu Glu Tyr Pro Glu Ala Pro
 115 120 125
 Ser Gly Arg Glu Gly Gly Val Ser Gly Glu Pro Ala Pro Arg Pro Glu
 130 135 140
 Thr Arg
 145

<210> 2117
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 2117
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 120
 atcaggtgac actcgcggtg gactgaatag atgcctgagt ctgaagacac tgtgtggctg
 180
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 240
 accgtcattg ccaacaagat tgccgacgcc cgctcggaag gcgaccttc tgagaacggc
 300
 ggctaccatg ccgcccgtga ggagcagggg caggccgagg cccgcatccg tcaactcgag
 360

<210> 2118
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 2118
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 Lys Leu Thr Gln Glu Leu Glu Tyr Leu Lys Gly Glu Gly Arg Thr Val
 20 25 30
 Ile Ala Asn Lys Ile Ala Asp Ala Arg Ser Glu Gly Asp Leu Ser Glu
 35 40 45
 Asn Gly Gly Tyr His Ala Ala Arg Glu Glu Gln Gly Gln Ala Glu Ala
 50 55 60
 Arg Ile Arg Gln Leu Glu
 65 70

<210> 2119
 <211> 465
 <212> DNA
 <213> Homo sapiens

<400> 2119
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 120
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 180
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 240
 acaacaaaat gggtttccac tccattgttg ttagaagcca gtgagttttt agcagaagac
 300
 agtcaagaga aattttggaa tttttagaaa gccagtcaaa atattggatc atcagatcat
 360
 gacggtagcg attattccta ctatcatgca atattggagg ctgcatttca gtttctgtca
 420
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<210> 2120

<211> 115

<212> PRT

<213> Homo sapiens

<400> 2120

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Leu	Val	Val	Leu	Thr	Val	Leu	Trp	Leu	Phe	Ser	Ser	Val	Lys	Ala	Asp
			20					25					30		
Ser	Lys	Ala	Ile	Thr	Thr	Ser	Leu	Thr	Thr	Lys	Trp	Phe	Ser	Thr	Pro
		35					40					45			
Leu	Leu	Leu	Glu	Ala	Ser	Glu	Phe	Leu	Ala	Glu	Asp	Ser	Gln	Glu	Lys
	50					55					60				
Phe	Trp	Asn	Phe	Val	Glu	Ala	Ser	Gln	Asn	Ile	Gly	Ser	Ser	Asp	His
65				70						75				80	
Asp	Gly	Thr	Asp	Tyr	Ser	Tyr	Tyr	His	Ala	Ile	Leu	Glu	Ala	Ala	Phe
			85					90						95	
Gln	Phe	Leu	Ser	Pro	Leu	Gln	Gln	Asn	Leu	Phe	Lys	Phe	Cys	Leu	Ser
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Leu	His	Ala													
			115												

<210> 2121

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2121

ccggacaagg tcaatggaat gaaaacctcc cggccgacag acaatagtat aaatgttaca
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 tgtggtcctc cttatgaaac taatggccct aaaacctttt acattttggt agtcagaagt
 120
 ggaggttctt ttgttacaaa atacaacaag acaaactgtc agttttatgt agataatctc
 180
 tactattcaa ctgactatga gtttctggtc tcttttcaca atggagtgtc cgagggagat
 240
 tcagttataa gaaatgagtc aacaaatttt aatgctaaag ccctgattat attcctggtg
 300

tttctgatta ttgtgacatc aatagccttg cttggt
336

<210> 2122

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2122

Pro	Asp	Lys	Val	Asn	Gly	Met	Lys	Thr	Ser	Arg	Pro	Thr	Asp	Asn	Ser
1				5					10					15	
Ile	Asn	Val	Thr	Cys	Gly	Pro	Pro	Tyr	Glu	Thr	Asn	Gly	Pro	Lys	Thr
			20					25					30		
Phe	Tyr	Ile	Leu	Val	Val	Arg	Ser	Gly	Gly	Ser	Phe	Val	Thr	Lys	Tyr
		35					40					45			
Asn	Lys	Thr	Asn	Cys	Gln	Phe	Tyr	Val	Asp	Asn	Leu	Tyr	Tyr	Ser	Thr
	50				55					60					
Asp	Tyr	Glu	Phe	Leu	Val	Ser	Phe	His	Asn	Gly	Val	Tyr	Glu	Gly	Asp
65				70					75					80	
Ser	Val	Ile	Arg	Asn	Glu	Ser	Thr	Asn	Phe	Asn	Ala	Lys	Ala	Leu	Ile
			85					90					95		
Ile	Phe	Leu	Val	Phe	Leu	Ile	Ile	Val	Thr	Ser	Ile	Ala	Leu	Leu	Val
			100					105					110		

<210> 2123

<211> 426

<212> DNA

<213> Homo sapiens

<400> 2123

aactggggccg agttcggcaa cctgcacccg ttcgcccccg ccgagcaaag cgctgggttat
60
cagcaactga ccgacgaact ggaagcgatg ctctgcgccg ccacagggtta tgacgcgatc
120
tccctgcagc cgaacgctgg ctcccagggc gactacgccg gtctgctggc gatccgcgct
180
taccaccaga gccgtggcga tgagcgtcgc gacatctgcc tgattccgtc ctctgcccac
240
ggcaccaacc cggcaaccgc caacatggcc ggcattgcgc tggtcgtgac cgcttgcgac
300
gcccggggca acgtcgacat cgaagacctg cgcgcccaagg ctatcgagca ccgcgaacac
360
ctcgcggcgc tgatgatcac ctaccgctcg acccacggcg tgttcgaaga aggcattccgc
420
gagatc
426

<210> 2124

<211> 142

<212> PRT

<213> Homo sapiens

<400> 2124

Asn Trp Ala Glu Phe Gly Asn Leu His Pro Phe Ala Pro Ala Glu Gln


```

      1           5           10           15
Ser Ala Gly Tyr Gln Gln Leu Thr Asp Glu Leu Glu Ala Met Leu Cys
      20           25           30
Ala Ala Thr Gly Tyr Asp Ala Ile Ser Leu Gln Pro Asn Ala Gly Ser
      35           40           45
Gln Gly Glu Tyr Ala Gly Leu Leu Ala Ile Arg Ala Tyr His Gln Ser
      50           55           60
Arg Gly Asp Glu Arg Arg Asp Ile Cys Leu Ile Pro Ser Ser Ala His
      65           70           75           80
Gly Thr Asn Pro Ala Thr Ala Asn Met Ala Gly Met Arg Val Val Val
      85           90           95
Thr Ala Cys Asp Ala Arg Gly Asn Val Asp Ile Glu Asp Leu Arg Ala
      100          105          110
Lys Ala Ile Glu His Arg Glu His Leu Ala Ala Leu Met Ile Thr Tyr
      115          120          125
Pro Ser Thr His Gly Val Phe Glu Glu Gly Ile Arg Glu Ile
      130          135          140

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<210> 2125

<211> 285

<212> DNA

<213> Homo sapiens

<400> 2125

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ngtatggcat ctgctgcttc aagttttgtg gtgacaccaa atgtcacttc taacacaacc
60
acagtcaagc ccaatatggt tatgttacct attcaaaaca caagagggtc aagattggtt
120
ctaaaggcgg ctgaagacgc ggcaccaccg gctgtcaccg ttgaagcggc caaggaagag
180
aagccgaagc caccaccaat tggacctaag agaggagcca aggtgagaat tcttaggaag
240
gagtcatact ggttcaaagg agtgggatca gttgtgactg ttgat
285

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<210> 2126

<211> 95

<212> PRT

<213> Homo sapiens

<400> 2126

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Xaa Met Ala Ser Ala Ala Ser Ser Phe Val Val Thr Pro Asn Val Thr
      1           5           10           15
Ser Asn Thr Thr Thr Val Lys Pro Asn Met Val Met Leu Pro Ile Gln
      20           25           30
Asn Thr Arg Gly Ser Arg Leu Val Leu Lys Ala Ala Glu Asp Ala Ala
      35           40           45
Pro Pro Ala Val Thr Val Glu Ala Ala Lys Glu Glu Lys Pro Lys Pro
      50           55           60
Pro Pro Ile Gly Pro Lys Arg Gly Ala Lys Val Arg Ile Leu Arg Lys
      65           70           75           80
Glu Ser Tyr Trp Phe Lys Gly Val Gly Ser Val Val Thr Val Asp
      85           90           95

```

<210> 2127
 <211> 454
 <212> DNA
 <213> Homo sapiens

<400> 2127
 atggcagcca agatgcttgc attgttcgct ctccctagctc tttgtgcaag cgccactagt
 60
 gcgacgcata ttccagggca cttgtcacca gtcatgccat tgggtaccat gaacccatgc
 120
 atgcagtact gcatgatgca acagggggctt gccagcttga tggcgtgtcc gtccctgatg
 180
 ctgcagcaac tgttggcctt accgcttcag acgatgccag tgatgatgcc acagatgatg
 240
 acgcctaaca tgatgtcacc attgatgatg ccgagcatga tgtcaccaat ggtcttgccg
 300
 agcatgatgt cgaaatgat gatgccacaa tgtcactgcg acgccgtctc gcagattatg
 360
 ctgcaacagc agttaccatt catgttcaac ccaatggcca tgacgattcc acccatgttc
 420
 ttacagcaac cctttgttgg tgctgcattc taga
 454

<210> 2128
 <211> 150
 <212> PRT
 <213> Homo sapiens

<400> 2128
 Met Ala Ala Lys Met Leu Ala Leu Phe Ala Leu Leu Ala Leu Cys Ala
 1 5 10 15
 Ser Ala Thr Ser Ala Thr His Ile Pro Gly His Leu Ser Pro Val Met
 20 25 30
 Pro Leu Gly Thr Met Asn Pro Cys Met Gln Tyr Cys Met Met Gln Gln
 35 40 45
 Gly Leu Ala Ser Leu Met Ala Cys Pro Ser Leu Met Leu Gln Gln Leu
 50 55 60
 Leu Ala Leu Pro Leu Gln Thr Met Pro Val Met Met Pro Gln Met Met
 65 70 75 80
 Thr Pro Asn Met Met Ser Pro Leu Met Met Pro Ser Met Met Ser Pro
 85 90 95
 Met Val Leu Pro Ser Met Met Ser Gln Met Met Met Pro Gln Cys His
 100 105 110
 Cys Asp Ala Val Ser Gln Ile Met Leu Gln Gln Gln Leu Pro Phe Met
 115 120 125
 Phe Asn Pro Met Ala Met Thr Ile Pro Pro Met Phe Leu Gln Gln Pro
 130 135 140
 Phe Val Gly Ala Ala Phe
 145 150

<210> 2129
 <211> 354
 <212> DNA
 <213> Homo sapiens

<400> 2129

acgcgtgact tggatgaacaa acccatatcc atcacccctc tcggtgttga tacggaaata
 60
 ctcacgccct ttgacaagcg gcgtgatgag aacggcggtg acgggggtgt gcgcatcggg
 120
 actatcaagg ctctccactc caaatatggg atcggtgaac tcatccgtgc cttcagtcgg
 180
 gtccatgatg aacggcctaa taccgtcctt cgtatctggg gcggcgcccc agacgagaat
 240
 cccctcaagg tcttggctcg ccgtcttgct cgggacgggt cgggtggagt tcgcggtgcc
 300
 attgatcatt ctgaggtcag aaatgccttg ggtagtttgg acatctttgc cgcc
 354

<210> 2130

<211> 118

<212> PRT

<213> Homo sapiens

<400> 2130

Thr	Arg	Asp	Leu	Val	Asn	Lys	Pro	Ile	Ser	Ile	Thr	Pro	Phe	Gly	Val
1				5					10					15	
Asp	Thr	Glu	Ile	Leu	Thr	Pro	Phe	Asp	Lys	Arg	Arg	Asp	Ala	Asn	Gly
		20						25					30		
Gly	Asp	Gly	Val	Val	Arg	Ile	Gly	Thr	Ile	Lys	Ala	Leu	His	Ser	Lys
		35					40					45			
Tyr	Gly	Ile	Gly	Glu	Leu	Ile	Arg	Ala	Phe	Ser	Arg	Val	His	Asp	Glu
	50					55					60				
Arg	Pro	Asn	Thr	Val	Leu	Arg	Ile	Trp	Gly	Gly	Gly	Pro	Asp	Glu	Asn
65					70					75				80	
Pro	Leu	Lys	Val	Leu	Ala	Arg	Arg	Leu	Val	Pro	Asp	Gly	Ser	Val	Glu
			85						90					95	
Phe	Arg	Gly	Ala	Ile	Asp	His	Ser	Glu	Val	Arg	Asn	Ala	Leu	Gly	Ser
			100					105						110	
Leu	Asp	Ile	Phe	Ala	Ala										
			115												

<210> 2131

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2131

gcatcgcggc cattgggttat gtgtgcctat tccattgggt atgtggaagg ttgggatcag
 60
 ccagacagtc attatgatgg tttgttacag ctgggcgagt ggggctttcg aatcaatgac
 120
 ctgatgaaga cggtagaggg cgcgccaggg tgcattgagt attatgaaat gctcaacgaa
 180
 caacgccccg acttgtctta tgacatagac ggtattgttt ataaagttga tcagattgac
 240
 ctgcaagaag agcttggttt tattgctcgt gcgccacgct gggcaattgc tcgaaaattt
 300

cctgctcaag aagaagttac gcgt
324

<210> 2132
<211> 108
<212> PRT
<213> Homo sapiens

<400> 2132
Ala Ser Arg Pro Leu Val Met Cys Ala Tyr Ser Ile Gly Tyr Val Glu
1 5 10 15
Gly Trp Asp Gln Pro Asp Ser His Tyr Asp Gly Leu Leu Gln Leu Gly
20 25 30
Glu Trp Gly Phe Arg Ile Asn Asp Leu Met Lys Thr Val Glu Gly Ala
35 40 45
Ala Gly Cys Ile Glu Tyr Tyr Glu Met Leu Asn Glu Gln Arg Pro Asp
50 55 60
Leu Ser Tyr Asp Ile Asp Gly Ile Val Tyr Lys Val Asp Gln Ile Asp
65 70 75 80
Leu Gln Glu Glu Leu Gly Phe Ile Ala Arg Ala Pro Arg Trp Ala Ile
85 90 95
Ala Arg Lys Phe Pro Ala Gln Glu Glu Val Thr Arg
100 105

<210> 2133
<211> 292
<212> DNA
<213> Homo sapiens

<400> 2133
ggtacctgca atatggtatt gcatgacatg aataaatttt tccttactct gaactcacta
60
gtggctgtct ttagaggacc cggcgaactt ttctgtcttt ttccacttg ctccatcaca
120
tacatcacat caccaacacc catcacatac atacacagtc atgaacggcc atcaggccac
180
accagattac atcgctgtgg atccaaccct gcatttttct gccctcctt tactgcgagt
240
gtcacctcta cccggaaagg tcttcaacct ccaagtttcc cagtaattta tt
292

<210> 2134
<211> 93
<212> PRT
<213> Homo sapiens

<400> 2134
Met Val Leu His Asp Met Asn Lys Phe Phe Leu Thr Leu Asn Ser Leu
1 5 10 15
Val Ala Val Phe Arg Gly Pro Gly Glu Leu Phe Leu Leu Phe Pro Thr
20 25 30
Cys Ser Ile Thr Tyr Ile Thr Ser Pro Thr Pro Ile Thr Tyr Ile His
35 40 45
Ser His Glu Arg Pro Ser Gly His Thr Arg Leu His Arg Cys Gly Ser

```

      50              55              60
Asn Pro Ala Phe Ser Cys Pro Ser Phe Thr Ala Ser Val Thr Ser Thr
65              70              75              80
Arg Lys Gly Leu Gln Pro Pro Ser Phe Pro Val Ile Tyr
      85              90

```

<210> 2135
 <211> 439
 <212> DNA
 <213> Homo sapiens

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<400> 2135
acgcgttcca ttggtgtgtc gaatttcaag accgagcatc tggacgccat cgagggggcc
60
actccgagcg tcgaccaaat cgagatgcat cctcgttca accaggcgac cttccgcgca
120
gagctggccg agcgcggcat taaccggag gcctggagcc cgctgggcca gtcgaaggac
180
ctcgacaatc ccgtcctcac cgatatttcc aaggcgactg gaaagacgcc tgcccagggtg
240
gtcattcgct ggcacctgca gatcggcaac gtggtattcc ccaagtcggt gacaccatca
300
cgaattgccg agaactttga tgtgttcgat ttcgagctgt ctgacgagca gatcgccgca
360
attgatggcc tggatcacgg caacaggctc ggtggtgacc cttctaccgc cgacttctga
420
ttctgcaaca ataaccggt
439

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<210> 2136
 <211> 139
 <212> PRT
 <213> Homo sapiens

```

<400> 2136
Thr Arg Ser Ile Gly Val Ser Asn Phe Lys Thr Glu His Leu Asp Ala
1              5              10              15
Ile Glu Gly Ala Thr Pro Ser Val Asp Gln Ile Glu Met His Pro Ser
      20              25              30
Phe Asn Gln Ala Thr Phe Arg Ala Glu Leu Ala Glu Arg Gly Ile Asn
      35              40              45
Pro Glu Ala Trp Ser Pro Leu Gly Gln Ser Lys Asp Leu Asp Asn Pro
50              55              60
Val Leu Thr Asp Ile Ser Lys Ala Thr Gly Lys Thr Pro Ala Gln Val
65              70              75              80
Val Ile Arg Trp His Leu Gln Ile Gly Asn Val Val Phe Pro Lys Ser
      85              90              95
Val Thr Pro Ser Arg Ile Ala Glu Asn Phe Asp Val Phe Asp Phe Glu
      100              105              110
Leu Ser Asp Glu Gln Ile Ala Ala Ile Asp Gly Leu Asp His Gly Asn
      115              120              125
Arg Leu Gly Gly Asp Pro Ser Thr Ala Asp Phe
130              135

```

<210> 2137
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 2137
 nncctttgcc ttggtgata ccctcaccac ctgggaacat cccccagaca ccctcttaac
 60
 tccgggacag agatggctgg cggagcctgg ggccgcctgg cctgttactt ggagttcctg
 120
 aagaaggagg agctgaagga gttccagctt ctgctcgcca ataaagcgca ctccaggagc
 180
 tcttccggtg agacaccgc tcagccagag aagacgagtg gcatggaggt ggcctcgta
 240
 ctggtggctc agtatgggga gcagcgggcc tgggacctag ccctccatac ctgggagcag
 300
 atggggctga ggtcactgtg cgccaagcc
 330

<210> 2138
 <211> 86
 <212> PRT
 <213> Homo sapiens

<400> 2138
 Met Ala Gly Gly Ala Trp Gly Arg Leu Ala Cys Tyr Leu Glu Phe Leu
 1 5 10 15
 Lys Lys Glu Glu Leu Lys Glu Phe Gln Leu Leu Leu Ala Asn Lys Ala
 20 25 30
 His Ser Arg Ser Ser Ser Gly Glu Thr Pro Ala Gln Pro Glu Lys Thr
 35 40 45
 Ser Gly Met Glu Val Ala Ser Tyr Leu Val Ala Gln Tyr Gly Glu Gln
 50 55 60
 Arg Ala Trp Asp Leu Ala Leu His Thr Trp Glu Gln Met Gly Leu Arg
 65 70 75 80
 Ser Leu Cys Ala Gln Ala
 85

<210> 2139
 <211> 433
 <212> DNA
 <213> Homo sapiens

<400> 2139
 gagcagttga gcgcccagaa caccgggatc aacagcaacc tgtcggacat ggccggccag
 60
 gtgaacaagc tggcgagtac catcgcccag tacaacgatc agatttccaa agtcaccacc
 120
 gccgccggtg ccccgaaacga cctgctggac cagcgcagcg aggcggtgcg ccagttgtcc
 180
 gagctggctg ggaccaggt ggtccagcgc ggttcgagtt atgacgtcta tatcggcagc
 240
 ggtcagcgcc tggatgatgg caacagcacc aacaccctgt ccgcagtgcc gagcaaggac
 300

gacccgagcc agtcggcctt gcagctggat cgcggcacca gcaccgtcga tatcacctcc
 360
 acggtgaccg gtggcgagat cggtggtctg ctgcgctatc gcagcgatgt gctcgaccgg
 420
 tcgatcaacg cgt
 433

<210> 2140
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 2140
 Glu Gln Leu Ser Ala Gln Asn Thr Gly Ile Asn Ser Asn Leu Ser Asp
 1 5 10 15
 Met Ala Gly Gln Val Asn Lys Leu Ala Ser Thr Ile Ala Gln Tyr Asn
 20 25 30
 Asp Gln Ile Ser Lys Val Thr Thr Ala Ala Gly Ala Pro Asn Asp Leu
 35 40 45
 Leu Asp Gln Arg Ser Glu Ala Val Arg Gln Leu Ser Glu Leu Val Gly
 50 55 60
 Thr Gln Val Val Gln Arg Gly Ser Ser Tyr Asp Val Tyr Ile Gly Ser
 65 70 75 80
 Gly Gln Arg Leu Val Met Gly Asn Ser Thr Asn Thr Leu Ser Ala Val
 85 90 95
 Pro Ser Lys Asp Asp Pro Ser Gln Ser Ala Leu Gln Leu Asp Arg Gly
 100 105 110
 Thr Ser Thr Val Asp Ile Thr Ser Thr Val Thr Gly Gly Glu Ile Gly
 115 120 125
 Gly Leu Leu Arg Tyr Arg Ser Asp Val Leu Asp Pro Ser Ile Asn Ala
 130 135 140

<210> 2141
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 2141
 nnatatccat gcagcgatcc tcatcaattt gctgtgttat taggctttgg tgcgacggct
 60
 gttttatcctt atctttcttt ccgcttgatc aatgatattg tggataaagg cgaagtgtta
 120
 ggtgacccaa ttgcttgta tggttaatat cgtaaaggta ttaacaaagg cttgatgaaa
 180
 atcctgtcta aaatgggtat ttcaacgatt gcctcttata gtggtgcgca attgtttgaa
 240
 gcggttggtc tggataactaa agtggtcgac ctttgtttca aaggcgttgc aagtcgtatc
 300
 aaagggtgctc gttttgaaga tttccagcgt gatcaagcaa cgattgcaa taatgcttgg
 360
 aagttacgta aacctattca acagggcggt tatcttaaata acgtacatga ctctgagtat
 420
 cacgcg
 426

<210> 2142
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 2142
 Xaa Tyr Pro Cys Ser Asp Pro His Gln Phe Ala Val Leu Leu Gly Phe
 1 5 10 15
 Gly Ala Thr Ala Val Tyr Pro Tyr Leu Ser Phe Arg Leu Ile Asn Asp
 20 25 30
 Met Val Asp Lys Gly Glu Val Leu Gly Asp Pro Ile Ala Cys His Val
 35 40 45
 Lys Tyr Arg Lys Gly Ile Asn Lys Gly Leu Met Lys Ile Leu Ser Lys
 50 55 60
 Met Gly Ile Ser Thr Ile Ala Ser Tyr Arg Gly Ala Gln Leu Phe Glu
 65 70 75 80
 Ala Val Gly Leu Asp Thr Lys Val Val Asp Leu Cys Phe Lys Gly Val
 85 90 95
 Ala Ser Arg Ile Lys Gly Ala Arg Phe Glu Asp Phe Gln Arg Asp Gln
 100 105 110
 Ala Thr Ile Ala Asn Asn Ala Trp Lys Leu Arg Lys Pro Ile Gln Gln
 115 120 125
 Gly Gly Tyr Leu Lys Tyr Val His Asp Ser Glu Tyr His Ala
 130 135 140

<210> 2143
 <211> 1008
 <212> DNA
 <213> Homo sapiens

<400> 2143
 gccggcttga caagcatgtt caccggtgac gctgtcgtga tcgtcgaggt gagccaattg
 60
 tgtcatattg tacgcagtat gtcttttcaa cgattcttgg cgggggtggc agccatcttg
 120
 cttctcctgc ctactgcgtg cgctgatgat gcgcaggcgc ccgttgctga taacctcggg
 180
 acggtcctca gcccctcaa ctcctcatt cgcgagccgg cgaattcgtc agtcaacggg
 240
 acgtcaaga gcacatatga gtacctcgg ctcacgacg gtcacgatct acccgacgac
 300
 gatggctacg ctcacgatca tctggctcgc gctttgcgcc cgtatttggg gaatgggtga
 360
 gacagtcggc agggccacgt caccacac atggcggcgt catccctgaa aacctcaac
 420
 gcgttgctcg acaaggagag atcagaggtc gacaaacgta cccgcctgcc gaagggctgc
 480
 atcacgagaa agacgggtgat gacggatctg cccatcgcca cgatgaggcg ggagatcggc
 540
 ctgtccaacg acgggttggt cctcacaccg tggaaggcca agacgacttc ttccgaggag
 600
 gctcgggtgg cgatgcaggc gctggccagt gccgacctat tcagcaatgc taaggacgcc
 660

gagaaatggg ggtgggagtc gatctcggac gggatattgc gccatctcga gacctacagt
 720
 ggcccagta cgactatcgc gatggccttg tcggcggcga ataccgcttc tacattgtct
 780
 cgttcccagt tgcaacgcat cggcgacagt ctgcgggatg cgccatatcc gaggaaggac
 840
 cttggtccgg cgctcattcg caatggaaag ccggtcaagg acaagtgcag tatcgaatcg
 900
 gcgtacctgt tgaggatttc cgggaattgg gcgtgggtgac atgacggttt cttggcaagg
 960
 tgtgaccaag acattcccct cgggcgattc cgcgcgtggg ggggtgcac
 1008

<210> 2144

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2144

Met	Phe	Thr	Gly	Asp	Ala	Val	Val	Ile	Val	Glu	Val	Ser	Gln	Leu	Cys
1				5					10					15	
His	Ile	Val	Arg	Ser	Met	Ser	Phe	Gln	Arg	Phe	Leu	Ala	Gly	Val	Ala
			20					25					30		
Ala	Ile	Leu	Leu	Leu	Pro	Thr	Ala	Cys	Ala	Asp	Asp	Ala	Gln	Ala	
	35					40				45					
Pro	Val	Val	Asp	Asn	Leu	Gly	Thr	Val	Leu	Ser	Pro	Ser	Asn	Ser	Leu
	50				55					60					
Ile	Arg	Glu	Pro	Ala	Asn	Ser	Ser	Val	Asn	Gly	Thr	Leu	Lys	Ser	Thr
65				70					75					80	
Tyr	Glu	Tyr	Leu	Arg	Leu	Ile	Asp	Gly	His	Asp	Leu	Pro	Asp	Asp	Asp
			85					90						95	
Gly	Tyr	Ala	His	Asp	His	Leu	Val	Ala	Ala	Leu	Arg	Pro	Tyr	Leu	Val
			100					105					110		
Asn	Gly	Gly	Asp	Ser	Arg	Gln	Ala	His	Val	Thr	Gln	Leu	Met	Ala	Ala
			115				120					125			
Ser	Ser	Leu	Lys	Thr	Leu	Asn	Ala	Leu	Ser	Asp	Lys	Glu	Arg	Ser	Glu
			130			135					140				
Val	Asp	Lys	Arg	Thr	Arg	Leu	Pro	Lys	Gly	Cys	Ile	Thr	Arg	Lys	Thr
145				150					155					160	
Val	Met	Thr	Asp	Leu	Pro	Ile	Ala	Thr	Met	Arg	Arg	Glu	Ile	Gly	Leu
			165						170					175	
Ser	Asn	Asp	Gly	Leu	Cys	Leu	Thr	Pro	Trp	Lys	Val	Lys	Thr	Thr	Ser
			180					185					190		
Ser	Glu	Glu	Ala	Arg	Trp	Ala	Met	Gln	Ala	Leu	Ala	Ser	Ala	Asp	Leu
			195			200						205			
Phe	Ser	Asn	Ala	Lys	Asp	Ala	Glu	Lys	Trp	Gly	Trp	Glu	Ser	Ile	Ser
			210			215						220			
Asp	Gly	Tyr	Leu	Arg	His	Leu	Glu	Thr	Tyr	Ser	Gly	Pro	Ser	Thr	Thr
225				230					235					240	
Ile	Ala	Met	Ala	Leu	Ser	Ala	Ala	Asn	Thr	Val	Ser	Thr	Leu	Ser	Arg
			245						250					255	
Ser	Gln	Leu	Gln	Arg	Ile	Gly	Asp	Ser	Leu	Ala	Asp	Ala	Pro	Tyr	Pro
			260					265					270		
Arg	Lys	Asp	Leu	Gly	Pro	Ala	Leu	Ile	Arg	Asn	Gly	Lys	Pro	Val	Lys

275 280 285
 Asp Lys Cys Ser Ile Glu Ser Ala Tyr Leu Leu Arg Tyr Ser Gly Asn
 290 295 300
 Trp Ala Trp
 305

<210> 2145
 <211> 389
 <212> DNA
 <213> Homo sapiens

<400> 2145
 tctagaatcg tgtataacat tctacacaat aagctaagcc tactcttgta gagtgcgac
 60
 atgacaaccc ttgaacaatc attatctcaa attcccgcac ttctgattat tcatgaacat
 120
 ttatttagct cggcccagcc ttctgctgaa caactaaaat tgattaaaga gtttggttgt
 180
 agcacagtca ttaaccttgc tttaactaat gtttcaaate atcttgagaa tgaagaccgt
 240
 atttggttag accttggttt aaattatatt catattccaa ttgattggga gatgccttct
 300
 gctgagcagt gcttattagt tttagatttg attgatcatt tagtgcaaaa tgaaattggt
 360
 tggatacatt gcgccaacaaa taaacgcgt
 389

<210> 2146
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 2146
 Met Thr Thr Leu Glu Gln Ser Leu Ser Gln Ile Pro Ala Phe Ser Ile
 1 5 10 15
 Ile His Glu His Leu Phe Ser Ser Ala Gln Pro Ser Ala Glu Gln Leu
 20 25 30
 Lys Leu Ile Lys Glu Phe Gly Cys Ser Thr Val Ile Asn Leu Ala Leu
 35 40 45
 Thr Asn Ala Ser Asn His Leu Glu Asn Glu Asp Arg Ile Cys Leu Asp
 50 55 60
 Leu Gly Leu Asn Tyr Ile His Ile Pro Ile Asp Trp Glu Met Pro Ser
 65 70 75 80
 Ala Glu Gln Cys Leu Leu Val Leu Asp Leu Ile Asp His Leu Val Gln
 85 90 95
 Asn Glu Ile Val Trp Ile His Cys Ala Lys Asn Lys Arg
 100 105

<210> 2147
 <211> 235
 <212> DNA
 <213> Homo sapiens

<400> 2147

ctccctgcgg gctgctctc cgaggacatg tgcagtcctg acccctgttt caatgggtggg
 60
 acttgccctcg tcacctggaa tgacttccac tgtacctgcc ctgccaatTT caccggggcct
 120
 acatgtgccc agcagctgtg gtgtcccgcc cagccctgtc tcccacctgc cactgtgtg
 180
 gcggaggcca cgttccgcga gggcccccc gccgcgttca gcgggcacaa cgcgt
 235

<210> 2148

<211> 78

<212> PRT

<213> Homo sapiens

<400> 2148

Leu	Pro	Ala	Gly	Cys	Val	Ser	Glu	Asp	Met	Cys	Ser	Pro	Asp	Pro	Cys
1				5				10					15		
Phe	Asn	Gly	Gly	Thr	Cys	Leu	Val	Thr	Trp	Asn	Asp	Phe	His	Cys	Thr
		20						25				30			
Cys	Pro	Ala	Asn	Phe	Thr	Gly	Pro	Thr	Cys	Ala	Gln	Gln	Leu	Trp	Cys
		35				40					45				
Pro	Gly	Gln	Pro	Cys	Leu	Pro	Pro	Ala	Thr	Cys	Val	Ala	Glu	Ala	Thr
	50				55					60					
Phe	Arg	Glu	Gly	Pro	Pro	Ala	Ala	Phe	Ser	Gly	His	Asn	Ala		
65				70						75					

<210> 2149

<211> 1474

<212> DNA

<213> Homo sapiens

<400> 2149

ntactgccac cattggaact tttgatgttg atggggaaga gttgcaacac ctccagggtt
 60
 gtccctgctga tgggtggctgc gaatgatttg ccttgacaat agctgaaaaa ccaccatctg
 120
 caacacgtgg gagtaagact tctcctgctc tttgccagtg gtctgaggtg atgaaccacc
 180
 ctggcttgggt gtgctgtgtc cagcaaaacta caggggtgcc gctggtagtt atggtgaaac
 240
 gagacacttt tcttatccac gagattaaga ctcttctctg taaagcgaag atccaagaca
 300
 tggttgctat taggcacacg gcctgcaatg agcagcagcg gacaacaatg attctgtctg
 360
 gtgaggatgg cagcctgcgc atttacatgg ccaacgtgga gaacacctcc tactggctgc
 420
 agccatccct gcagcccagc agtgtcatca gcatcatgaa gcctgttcga aagcgcaaaa
 480
 cagctacaat cacaaccng cactctagc caggtgactt tccccattga cttttttgaa
 540
 cacaaccagc agctgacaga tgtggagttt ggtggtaacg acctcctaca ggtctataat
 600
 gcacaacaga taaaacaccg gctgaattcc actggcatgt atgtggccaa caccaagccc
 660

ggaggcttca ccattgagat tagtaacaac aatagcacta tggatgatgac aggcattgcgg
 720
 atccagattg ggactcaagc aatagaacgg gccccgtcat atatcgagat cttcggcaga
 780
 actatgcagc tcaacctgag tcgctcacgc tggtttgact tccccctcac cagagaagaa
 840
 gccctgcagg ctgataaaga gctgaacctc ttcattgggg cctcgggtga tccagcaggt
 900
 gtcaccatga tagatgctgt aaaaatttat ggcaagacta aggagcagtt tggctggcct
 960
 gatgagcccc cagaagaatt cctttctgcc tctgtcagca acatctgccc ttcaaattctg
 1020
 aaccagagca acggcactgg agatagcgac tcagctgccc ccactacgac cagtggaaact
 1080
 gtccctggaga ggctgggtgt gagttcttta gaagccctgg aaagctgctt tgccgttggc
 1140
 ccaatcatcg agaaggagag aaacaagaat gctgctcagg agctggccac tttgctgttg
 1200
 tccctgccag cacctgccag tgtccagcag cagtccaaga gccttctggc cagcctgcac
 1260
 accagccgct cggcctacca cagccacaag gtaactgttc tctcagggaa aggaaattgc
 1320
 agtgctgaca gggaatcaaa taagtttagct cttcattgta aagcaacagc acagcaaagt
 1380
 aaggtagagg gaggatagca ttcagattag acctacattt tacagagttt ctcttgagaa
 1440
 attctcaagt gccactcaaa actgagggtg agcc
 1474

<210> 2150

<211> 312

<212> PRT

<213> Homo sapiens

<400> 2150

Ser	Leu	Phe	Glu	Ser	Ala	Lys	Gln	Leu	Gln	Ser	Gln	Pro	Xaa	Thr	Ser
1			5					10						15	
Ser	Gln	Val	Thr	Phe	Pro	Ile	Asp	Phe	Phe	Glu	His	Asn	Gln	Gln	Leu
		20					25					30			
Thr	Asp	Val	Glu	Phe	Gly	Gly	Asn	Asp	Leu	Leu	Gln	Val	Tyr	Asn	Ala
		35				40					45				
Gln	Gln	Ile	Lys	His	Arg	Leu	Asn	Ser	Thr	Gly	Met	Tyr	Val	Ala	Asn
		50				55				60					
Thr	Lys	Pro	Gly	Gly	Phe	Thr	Ile	Glu	Ile	Ser	Asn	Asn	Asn	Ser	Thr
65				70				75						80	
Met	Val	Met	Thr	Gly	Met	Arg	Ile	Gln	Ile	Gly	Thr	Gln	Ala	Ile	Glu
			85				90					95			
Arg	Ala	Pro	Ser	Tyr	Ile	Glu	Ile	Phe	Gly	Arg	Thr	Met	Gln	Leu	Asn
		100					105					110			
Leu	Ser	Arg	Ser	Arg	Trp	Phe	Asp	Phe	Pro	Phe	Thr	Arg	Glu	Glu	Ala
		115				120					125				
Leu	Gln	Ala	Asp	Lys	Lys	Leu	Asn	Leu	Phe	Ile	Gly	Ala	Ser	Val	Asp
	130					135				140					
Pro	Ala	Gly	Val	Thr	Met	Ile	Asp	Ala	Val	Lys	Ile	Tyr	Gly	Lys	Thr

145 150 155 160
 Lys Glu Gln Phe Gly Trp Pro Asp Glu Pro Pro Glu Glu Phe Pro Ser
 165 170 175
 Ala Ser Val Ser Asn Ile Cys Pro Ser Asn Leu Asn Gln Ser Asn Gly
 180 185 190
 Thr Gly Asp Ser Asp Ser Ala Ala Pro Thr Thr Thr Ser Gly Thr Val
 195 200 205
 Leu Glu Arg Leu Val Val Ser Ser Leu Glu Ala Leu Glu Ser Cys Phe
 210 215 220
 Ala Val Gly Pro Ile Ile Glu Lys Glu Arg Asn Lys Asn Ala Ala Gln
 225 230 235 240
 Glu Leu Ala Thr Leu Leu Ser Leu Pro Ala Pro Ala Ser Val Gln
 245 250 255
 Gln Gln Ser Lys Ser Leu Leu Ala Ser Leu His Thr Ser Arg Ser Ala
 260 265 270
 Tyr His Ser His Lys Val Thr Val Leu Ser Gly Lys Gly Asn Cys Ser
 275 280 285
 Ala Asp Arg Glu Ser Asn Lys Leu Ala Leu His Cys Lys Ala Thr Ala
 290 295 300
 Gln Gln Ser Lys Val Glu Gly Gly
 305 310

<210> 2151

<211> 511

<212> DNA

<213> Homo sapiens

<400> 2151

gccggcggttt acctgtgggg cccgggtcggg cgcggcaaga cctggctgat ggatcaattc
 60
 caccaaagcc tgnncgggtg ccggcgcnng cggcagcact ttcatcactt catgggctgg
 120
 gtgcatcagc gctcctttca gttgaccggg atcgccgatc cattgcgggc gctggctcgt
 180
 gagctggcgg ccgaggtgcg ggtgctgtgt ttcgatgagc tgttcgtcaa tgacatcggg
 240
 gacgcgatca ttctcgggcg cctgtttcag gtgatgttcg acgcaggcgt ggtgggtggtc
 300
 tgcacctcca atctgccgcc ggatcagctg tatgccgacg gcttcaaccg cgaccgcttc
 360
 ctgccggcga tcaccgcgat caaacagcac atgcaagtgg tcgcgggtgaa tggcgcggaa
 420
 gatcatcgct tgcattcccg cgccatcgag cagcggtact gggtcgctct gccggagcag
 480
 ggtagcgcgt tgagccaggt gttcgacgcg t
 511

<210> 2152

<211> 170

<212> PRT

<213> Homo sapiens

<400> 2152

Ala Gly Val Tyr Leu Trp Gly Pro Val Gly Arg Gly Lys Thr Trp Leu

1	5	10	15
Met Asp Gln Phe His Gln Ser Leu Xaa Gly Cys Arg Arg Xaa Arg Gln			
	20	25	30
His Phe His His Phe Met Gly Trp Val His Gln Arg Ser Phe Gln Leu			
	35	40	45
Thr Gly Ile Ala Asp Pro Leu Arg Ala Leu Ala Arg Glu Leu Ala Ala			
	50	55	60
Glu Val Arg Val Leu Cys Phe Asp Glu Leu Phe Val Asn Asp Ile Gly			
65	70	75	80
Asp Ala Ile Ile Leu Gly Arg Leu Phe Gln Val Met Phe Asp Ala Gly			
	85	90	95
Val Val Val Val Cys Thr Ser Asn Leu Pro Pro Asp Gln Leu Tyr Ala			
	100	105	110
Asp Gly Phe Asn Arg Asp Arg Phe Leu Pro Ala Ile Thr Ala Ile Lys			
	115	120	125
Gln His Met Gln Val Val Ala Val Asn Gly Ala Glu Asp His Arg Leu			
	130	135	140
His Pro Gly Ala Ile Glu Gln Arg Tyr Trp Val Ala Leu Pro Glu Gln			
145	150	155	160
Gly Ser Ala Leu Ser Gln Val Phe Asp Ala			
	165	170	

<210> 2153

<211> 528

<212> DNA

<213> Homo sapiens

<400> 2153

```

nnaccggtgc caaagagctg gggatcaacc tgccgaacac cgccggtacg cagcaggtgt
60
tcagtacgtg cacggcgatt ggcgggcgga attgggacca ctccgcgctg atcaagggcc
120
tggagcatat ggccaacttt tcgattcgcg atcaataagc cacaccgctc ccacctttga
180
tggcattcca agtctgaaat tgatccatct ctaataacaa aaatccccgg gagccccgtt
240
atgtcggtcg atccgcaaca cctgcttcgc gagctgtttg ccacagccat cgatgccgcc
300
caccgccggc atgtccttga accttatctg cccgctgacc gcacaggccg tgtgattgtg
360
attgggcccc gcaaaaccgc acccgccatg gccctcgctg tcgagaacgg ctggcaaggc
420
gaagtcaccg gcctggtggt caccgctac ggccacggcg cgccgtgcaa aaaaatcgaa
480
gtggtcgagg ccgctcacc ggtgccggat gccgcgggcc tggcggtg
528

```

<210> 2154

<211> 96

<212> PRT

<213> Homo sapiens

<400> 2154

Met Ser Val Asp Pro Gln His Leu Leu Arg Glu Leu Phe Ala Thr Ala

```

1           5           10           15
Ile Asp Ala Ala His Pro Arg His Val Leu Glu Pro Tyr Leu Pro Ala
20           25           30
Asp Arg Thr Gly Arg Val Ile Val Ile Gly Pro Gly Lys Thr Ala Pro
35           40           45
Ala Met Ala Leu Val Val Glu Asn Gly Trp Gln Gly Glu Val Thr Gly
50           55           60
Leu Val Val Thr Arg Tyr Gly His Gly Ala Pro Cys Lys Lys Ile Glu
65           70           75           80
Val Val Glu Ala Ala His Pro Val Pro Asp Ala Ala Gly Leu Ala Val
85           90           95

```

<210> 2155

<211> 297

<212> DNA

<213> Homo sapiens

<400> 2155

```

gtgcaccgcc acggcacacc cgccatgccg cgccgctatt tcgaggccct gctgcaggag
60
ttcggccccc actgcgaggt gtcaccgtc accgattcag agggcaaccc cctcagttcg
120
gtgctcagtt tctacttcg tgatgaagtg ctgccctact atgcgggcga cgccgtcgcg
180
gcgcgcgaac tggcgcccaa tgacttcaaa tactgggagc tgatgcgacg cgctgtgcg
240
cgcggcctca aggtgtttga ctacggccgc agcaagcagg gcacgggctc ctacgcn
297

```

<210> 2156

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2156

```

Met Pro Arg Arg Tyr Phe Glu Ala Leu Leu Gln Glu Phe Gly Pro Asp
1           5           10           15
Cys Glu Val Leu Thr Val Thr Asp Ser Glu Gly Asn Pro Leu Ser Ser
20           25           30
Val Leu Ser Phe Tyr Phe Arg Asp Glu Val Leu Pro Tyr Tyr Ala Gly
35           40           45
Asp Ala Val Ala Ala Arg Glu Leu Ala Ala Asn Asp Phe Lys Tyr Trp
50           55           60
Glu Leu Met Arg Arg Ala Cys Ala Arg Gly Leu Lys Val Phe Asp Tyr
65           70           75           80
Gly Arg Ser Lys Gln Gly Thr Gly Ser Tyr Ala
85           90

```

<210> 2157

<211> 711

<212> DNA

<213> Homo sapiens

<400> 2157

naccgagata acgaggtcgt catcatctcc actgggtccc aaggtgagcc actttcggcc
 60
 ctagcaagga tcgccaaccg agagcaccga gacatcgagg tgggggaggg agataccgtt
 120
 ttgctggcat cctctctcat cccgggtaat gagaatgccg tctatcgagt gattaatggc
 180
 ctgacgaagc ttggcgccgc cgtggtacat aagggaacg ctttgggtcca cgtttccggc
 240
 catgccgcag cgggagagct gctgtacgcg tataacatcg tgcggccacg cgctgtgatg
 300
 ccgattcatg gtgaggtgcg tcattctgtc gctaagccg atctggccaa agcaaccggt
 360
 gtcgatgaga acaacgtggt gcttgtcgag gacggcgggg ttattgacct tgttgacgga
 420
 gtaccgcgag ttgttgcaa ggtcgatgcc tcgtacatcc ttgttgacgg atctgggggtg
 480
 ggggagctta ccgaggacac gctcactgat cgccgtatcc tcggtgagga gggattcttg
 540
 tcagtcgtca ccgtggtcga caccgctcg gcgtcagtg tgtctcgccc ggcgatccag
 600
 gcgcgtgggt ttgccgaggg cgactcggtc ttcgcggaga tcaccgacca gatcgtcacc
 660
 gagctagaga aggcgatggc cgggtggtatg gacgataccc accggttgca a
 711

<210> 2158

<211> 237

<212> PRT

<213> Homo sapiens

<400> 2158

Xaa	Arg	Asp	Asn	Glu	Val	Val	Ile	Ile	Ser	Thr	Gly	Ser	Gln	Gly	Glu
1			5						10				15		
Pro	Leu	Ser	Ala	Leu	Ala	Arg	Ile	Ala	Asn	Arg	Glu	His	Arg	Asp	Ile
			20					25					30		
Glu	Val	Gly	Glu	Gly	Asp	Thr	Val	Leu	Leu	Ala	Ser	Ser	Leu	Ile	Pro
		35					40					45			
Gly	Asn	Glu	Asn	Ala	Val	Tyr	Arg	Val	Ile	Asn	Gly	Leu	Thr	Lys	Leu
		50				55					60				
Gly	Ala	Ala	Val	Val	His	Lys	Gly	Asn	Ala	Leu	Val	His	Val	Ser	Gly
65					70				75					80	
His	Ala	Ala	Ala	Gly	Glu	Leu	Leu	Tyr	Ala	Tyr	Asn	Ile	Val	Arg	Pro
				85					90					95	
Arg	Ala	Val	Met	Pro	Ile	His	Gly	Glu	Val	Arg	His	Leu	Val	Ala	Asn
			100					105					110		
Ala	Asp	Leu	Ala	Lys	Ala	Thr	Gly	Val	Asp	Glu	Asn	Asn	Val	Val	Leu
		115					120					125			
Val	Glu	Asp	Gly	Gly	Val	Ile	Asp	Leu	Val	Asp	Gly	Val	Pro	Arg	Val
		130				135					140				
Val	Gly	Lys	Val	Asp	Ala	Ser	Tyr	Ile	Leu	Val	Asp	Gly	Ser	Gly	Val
145					150				155					160	
Gly	Glu	Leu	Thr	Glu	Asp	Thr	Leu	Thr	Asp	Arg	Arg	Ile	Leu	Gly	Glu
				165				170					175		
Glu	Gly	Phe	Leu	Ser	Val	Val	Thr	Val	Val	Asp	Thr	Arg	Ser	Ala	Ser


```

      180      185      190
Val Val Ser Arg Pro Ala Ile Gln Ala Arg Gly Phe Ala Glu Gly Asp
      195      200      205
Ser Val Phe Ala Glu Ile Thr Asp Gln Ile Val Thr Glu Leu Glu Lys
      210      215      220
Ala Met Ala Gly Gly Met Asp Asp Thr His Arg Leu Gln
      225      230      235

```

<210> 2159
 <211> 322
 <212> DNA
 <213> Homo sapiens

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<400> 2159
tcgcgagcac actccagcct ctggagagac gacaacgcgt gaaggggcac cagcttgagg
60
ggcagcagct ccaggggagg cctgggaggg ctttgtgcag aagaagcctg tttccttcta
120
cctgttttga aaagttgtct ctgcagatgg tgggtgagag ttcgctgcca gggccactgt
180
cttccttgcc ctgcggacac ttcttcccca ccttcctaaa gctgtgggag acctggagcc
240
gtggagcatc aatggctctt tgactcagga atcttaaaaa atcacaccct ggggctacca
300
tgggggcctt ctggttctcc tt
322

```

<210> 2160
 <211> 100
 <212> PRT
 <213> Homo sapiens

```

<400> 2160
Met Val Ala Pro Gly Cys Asp Phe Leu Arg Phe Leu Ser Gln Arg Ala
1      5      10      15
Ile Asp Ala Pro Arg Leu Gln Val Ser His Ser Phe Arg Lys Val Gly
      20      25      30
Lys Lys Cys Pro Gln Gly Arg Glu Asp Ser Gly Pro Gly Ser Glu Leu
      35      40      45
Ser Pro Thr Ile Cys Arg Asp Asn Phe Ser Lys Gln Val Glu Gly Asn
      50      55      60
Arg Leu Leu Leu His Lys Ala Leu Pro Gly Arg Pro Trp Ser Cys Cys
      65      70      75      80
Pro Ala Ser Trp Cys Pro Phe Thr Arg Cys Arg Leu Ser Arg Gly Trp
      85      90      95
Ser Val Leu Ala
      100

```

<210> 2161
 <211> 1070
 <212> DNA
 <213> Homo sapiens

<400> 2161

tcttagggga aggggaaggct tatctgaaga gtagacctct ggttttgaat gagggagaca
 60
 gtggggatat gaggggagga aacctcaaaa agaatatgta tccatcacta tgaaaggtta
 120
 ggctatacag gggaagcctc caaagggaaa tctggaaaaa tgttctgaga gggacattaa
 180
 ggatgtactc agaaattaag aaaacatatt aggacttgcc aaaagtgaga gaagcaactg
 240
 aggagactta tatgcaaaaa tcgcaaagaa ggagagaaca aaagatggag gttggatgct
 300
 aaatagggaa agagaacgcg tgaatgaggt agggggcaga acatgcagtg cagaaaaaca
 360
 acagatatgg aagggcatta aagagggcta aatgggaata ttaggaaatg agagttggga
 420
 atttgtcaga gttgtgtatt aacaaggaga gggtaaggta agaaggtggc aaagtaagag
 480
 ccagggcata aggttttgct gtccaggaag ctttgttga aaaatgttag aagtaatggg
 540
 tttggtcagt atggtgagag gtgagagagg ctaaattggga tgggcataaa gggcaggcca
 600
 gtggcaagaa tcctatgaaa gtgtaggcag atctgagagc acagacaaat acagtggaga
 660
 atgtggcaca gggcagaggg cagtgggctg agcagcgagt gcccatgggg aggggagtat
 720
 ccagaagaac ccattgagtc cctaagaatg acacacaggt gacagctgaa agaaggaggg
 780
 acacagaaga tatagcagca tgattctctg gggcaaaatg aggaagaaag gaatggaaga
 840
 agaaagtgaa gggttcctgc tgatgtgagg ggatgactgg aggaaaggca ggtattgact
 900
 ggggggtaaa ggaaccattc ttggatcaag gttatgatgg aataagaagg aagagagagc
 960
 tggctagctg agtaaaggac catcgataaa aacagacaaa agttaagact agatggagt
 1020
 gcaactaggc agatcagatg tatttttaaa aggggaaact gctaagatct
 1070

<210> 2162

<211> 145

<212> PRT

<213> Homo sapiens

<400> 2162

Met Val Leu Tyr Ser Ala Ser Gln Leu Ser Leu Pro Ser Tyr Ser Ile
 1 5 10 15
 Ile Thr Leu Ile Gln Glu Trp Phe Leu Tyr Pro Pro Val Asn Thr Cys
 20 25 30
 Leu Ser Ser Ser His Pro Leu Thr Ser Ala Gly Thr Leu His Phe Leu
 35 40 45
 Leu Pro Phe Leu Ser Ser Ser Phe Cys Pro Arg Glu Ser Cys Cys Tyr
 50 55 60
 Ile Phe Cys Val Pro Pro Ser Phe Ser Cys His Leu Cys Val Ile Leu
 65 70 75 80
 Arg Asp Ser Met Gly Ser Ser Gly Tyr Ser Pro Pro His Gly His Ser

```

      85              90              95
Leu Leu Ser Pro Leu Pro Ser Ala Leu Cys His Ile Leu His Cys Ile
      100              105              110
Cys Leu Cys Ser Gln Ile Cys Leu His Phe His Arg Ile Leu Ala Thr
      115              120              125
Gly Leu Pro Phe Met Pro Ile Pro Phe Ser Leu Ser His Leu Ser Pro
      130              135              140
Tyr
145

```

<210> 2163
 <211> 657
 <212> DNA
 <213> Homo sapiens

```

<400> 2163
tatttaaattc tttataaaaa aggtaggagg atcaggactt cgacccccctt aaaacgcggc
60
ggcctccctc caatccacct ccacttccta caccaccccc gctctcccc ccccccttt
120
tggttccggg ttggaagggt gggtgaaatg ggaaccgaat accaatttca cccgggaacc
180
agtaatgccc atgataaccg ccaagttggg accgaagttg ggatccataa gtacgggcgg
240
ccagtggggt ggaattgggt taagccccct ccagccttt ctccgaccgc gtgctccgtc
300
agacatgcca agaggctctc tctccaggag agccacctgt gaaaccacc cggcatgctc
360
ctcccaccac tgtgcacaga cgagtgcctg ggctccagag agggagggag ctgaaggcct
420
cagacaggag tccgtcccggt ccagtcctcat catccaaga aacatccggc ccgactccct
480
gcagctccat ggctcaacaa ggtgcggatg cctgctggac ctggctgctt tccatccaac
540
tttgatccct tccccagag gaagagtgt acctaggag aagtgtggtg cgcacaggca
600
tgcagcctgg tctcttgctc aggcggcttg cgcagattcc tagaggaatc tgcagcg
657

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<210> 2164
 <211> 152
 <212> PRT
 <213> Homo sapiens

```

<400> 2164
Met Pro Met Ile Thr Ala Lys Leu Gly Pro Lys Leu Gly Ser Ile Ser
  1              5              10              15
Thr Gly Gly Gln Trp Gly Gly Ile Gly Leu Ser Pro Leu Pro Ala Phe
      20              25              30
Leu Arg Pro Arg Ala Pro Ser Asp Met Pro Arg Gly Ser Leu Ser Arg
      35              40              45
Arg Ala Thr Cys Glu Thr His Pro Ala Cys Ser Ser His His Cys Ala
      50              55              60
Gln Thr Ser Ala Trp Ala Pro Glu Arg Glu Gly Ala Glu Gly Leu Arg

```

```

65          70          75          80
Gln Glu Ser Val Pro Ser Ser Pro Ile Ile Pro Arg Asn Ile Arg Pro
          85          90          95
Asp Ser Leu Gln Leu His Gly Ser Thr Arg Cys Gly Cys Leu Leu Asp
          100          105          110
Leu Ala Ala Phe His Pro Thr Leu Ile Pro Ser Pro Arg Gly Arg Val
          115          120          125
Leu Pro Arg Asp Lys Cys Gly Ala His Arg His Ala Ala Trp Ser Leu
          130          135          140
Ala Gln Ala Ala Cys Ala Asp Ser
145          150

```

<210> 2165

<211> 962

<212> DNA

<213> Homo sapiens

<400> 2165

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nctttctcat cgacagcgac gcacaaccgg cgacatcacc ggtgacgggt caaggtggca
60
gcccgagggc cgcgcgtgaa cttattgtgt cgtcttatgg aagaaaagtc actcggaagt
120
accgtaaata accccagcgc ctcattcccc gaattctgttc gccatctgct gtcgcccctg
180
cgcttaaggc atcacccac tagactgacc gaagtctcgc cgagggaggc tagggaggct
240
taggtggcca ggaatgacat cgggacgacg tctacgcgtc gaataggcag cggacgtacg
300
tcgagtaccg gccgtacggt ggtgtcttct gaccgcacac gcagagctat cgctaaaaga
360
ttgatggccc gcacctcagc tatgacgacg gccactctag aggaaatggg tcgtcgacac
420
tcctggttcc gtgatctgtc agccgaagaa agatcgtgga tctcgatcgt ggctcgctca
480
ggtattgacg gcttcgtcca gtggtttgct gacgatgacg ccgagcccta ctccccacc
540
gacgtcttcg acgtggcgcc ccggtccatg acccgcaaga tctccttgca ccagacagtc
600
gagctcgccc gcaccacgat tgacgtcggt gaggcacaaa ttgagaccga aatgccacgc
660
ggtgatcgcc aagtgtgctg cactgccatc gttcactact cccgcgaggt ggccttcgcc
720
gccgccgagg ttacgcgcg agccgccgaa cgtcgcggtta cctgggatga acgtctggaa
780
tccttcgtcg ttgatgccgt cgtgcgagcc gacgccgatg aacagctcat ctgcgcagct
840
tctactctcg gctggcgccc gggcatcaac ctctgcgtcg ttgtcgggcg ggccccgacg
900
accgagcatg aactccacgt gctgcgacgt gatggagaac gcatgcagat gacggtgcta
960
gc
962

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<210> 2166

<211> 239
 <212> PRT
 <213> Homo sapiens

<400> 2166
 Val Ala Arg Asn Asp Ile Gly Thr Thr Ser Thr Arg Arg Ile Gly Ser
 1 5 10 15
 Gly Arg Thr Ser Ser Thr Gly Arg Thr Val Val Ser Ser Asp Arg Thr
 20 25 30
 Arg Arg Ala Ile Ala Lys Arg Leu Met Ala Arg Thr Ser Ala Met Thr
 35 40 45
 Thr Ala Thr Leu Glu Glu Met Gly Arg Arg His Ser Trp Phe Arg Asp
 50 55 60
 Leu Ser Ala Glu Glu Arg Ser Trp Ile Ser Ile Val Ala Arg Ser Gly
 65 70 75 80
 Ile Asp Gly Phe Val Gln Trp Phe Ala Asp Asp Asp Ala Glu Pro Tyr
 85 90 95
 Ser Pro Thr Asp Val Phe Asp Val Ala Pro Arg Ser Met Thr Arg Lys
 100 105 110
 Ile Ser Leu His Gln Thr Val Glu Leu Val Arg Thr Thr Ile Asp Val
 115 120 125
 Val Glu Ala Gln Ile Glu Thr Glu Met Pro Arg Gly Asp Arg Gln Val
 130 135 140
 Leu Arg Thr Ala Ile Val His Tyr Ser Arg Glu Val Ala Phe Ala Ala
 145 150 155 160
 Ala Glu Val Tyr Ala Arg Ala Ala Glu Arg Arg Gly Thr Trp Asp Glu
 165 170 175
 Arg Leu Glu Ser Leu Val Val Asp Ala Val Val Arg Ala Asp Ala Asp
 180 185 190
 Glu Gln Leu Ile Ser Arg Ala Ser Thr Leu Gly Trp Arg Pro Gly Ile
 195 200 205
 Asn Leu Cys Val Val Val Gly Arg Ala Pro Thr Thr Glu His Glu Leu
 210 215 220
 His Val Leu Arg Arg Asp Gly Glu Arg Met Gln Met Thr Val Leu
 225 230 235

<210> 2167
 <211> 325
 <212> DNA
 <213> Homo sapiens

<400> 2167
 accggtgcag tttgtgaggg gttggtgacg cccgatcggg aggttcacgc cgtcacggcg
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 catccacatt atcccgactg gaagatctcg ccaggttacg gacagtgggc gcgtagcgaa
 120
 cagatcgaca gtgtgactgt gacgcgagtc agacacttcg tcccgcggcg tcccacggcg
 180
 attcttcgag cggtgtctga ggtgacgttc gggttgcgtc tctgcgccgt ccgttggcga
 240
 agcaccgcgg cgattgtggc tgtgtcgccg gccttgcctc cgacgcggtc gcgcgggtcg
 300
 tgcgtgatc tcccacagca taccc
 325

<210> 2168
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 2168
 Thr Gly Ala Val Cys Glu Gly Leu Val Thr Pro Asp Arg Glu Val His
 1 5 10 15
 Ala Val Thr Ala His Pro His Tyr Pro Asp Trp Lys Ile Ser Pro Gly
 20 25 30
 Tyr Gly Gln Trp Ser Arg Ser Glu Gln Ile Asp Ser Val Thr Val Thr
 35 40 45
 Arg Val Arg His Phe Val Pro Arg Arg Pro Thr Ala Ile Leu Arg Ala
 50 55 60
 Val Ser Glu Val Thr Phe Gly Leu Arg Leu Cys Ala Val Arg Trp Arg
 65 70 75 80
 Ser Thr Ala Ala Ile Val Ala Val Ser Pro Ala Leu Leu Ser Thr Arg
 85 90 95
 Ser Arg Gly Ser Cys Ala Asp Leu Pro Gln His Thr
 100 105

<210> 2169
 <211> 309
 <212> DNA
 <213> Homo sapiens

<400> 2169
 gaggacgcct acgtgctcat caccagggc aagatctcgg cgatcgccga cgtcctgccg
 60
 atcctggaga aggtcgtcaa ggccggcaag ccgctgctcg tcatcgccga ggacatcgac
 120
 ggggaggccc tgtccaccct cgctgtcaat aagatccgcg gtaccttcag ctcggtggca
 180
 gtcaaggcgc ccggttcg tgaccgccgc aaggcaatgc tgcaggacat cgccaccctc
 240
 accggtggtc aggtcgtcgc tcccagaggtt gggctcaagc tcgaccaggt gggcctcgag
 300
 gttcagggc
 309

<210> 2170
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 2170
 Glu Asp Ala Tyr Val Leu Ile Thr Gln Gly Lys Ile Ser Ala Ile Ala
 1 5 10 15
 Asp Val Leu Pro Ile Leu Glu Lys Val Val Lys Ala Gly Lys Pro Leu
 20 25 30
 Leu Val Ile Ala Glu Asp Ile Asp Gly Glu Ala Leu Ser Thr Leu Val
 35 40 45
 Val Asn Lys Ile Arg Gly Thr Phe Ser Ser Val Ala Val Lys Ala Pro

50 55 60
 Gly Phe Gly Asp Arg Arg Lys Ala Met Leu Gln Asp Ile Ala Thr Leu
 65 70 75 80
 Thr Gly Gly Gln Val Val Ala Pro Glu Val Gly Leu Lys Leu Asp Gln
 85 90 95
 Val Gly Leu Glu Val Gln Gly
 100

<210> 2171
 <211> 518
 <212> DNA
 <213> Homo sapiens

<400> 2171
 cgcgtaatgt gtattaaggt ccttggtggc tcgcatcgcc gttatgcagc aatcgggtgat
 60
 atcatcaaag ttccagtga ggaagcaatt cctcgcgga aaattaaaaa aggtaatgtt
 120
 cattcagctg tggtagtgcg taccagaaaa ggtgtacgtc gtcccgatgg ttctgttatt
 180
 cgttttgatc gcaacgcagc ggttatcttg aatgcaaaca accagccagt cggtaacagt
 240
 atctttggcc ctgtaaccg tgagcttcga aatgaaaatt tcatgaagat tgtttcactg
 300
 gcgcagaag tactgttaagg aaccgaaaat ggcagcaaaa ataaaacgtg acgatgaagt
 360
 aattgttatt gccggtaaag ataaaggtaa aactgggaaa gtttctcaag ttttaactaa
 420
 cggtaaagta attattgaag gtgtaaatgt tcaaaagaaa caccaaaaac caaacctca
 480
 agcgggctg gaaggcgga tcattgaaca gaatgcat
 518

<210> 2172
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 2172
 Arg Val Met Cys Ile Lys Val Leu Gly Gly Ser His Arg Arg Tyr Ala
 1 5 10 15
 Ala Ile Gly Asp Ile Ile Lys Val Ser Val Lys Glu Ala Ile Pro Arg
 20 25 30
 Gly Lys Ile Lys Lys Gly Asn Val His Ser Ala Val Val Val Arg Thr
 35 40 45
 Arg Lys Gly Val Arg Arg Pro Asp Gly Ser Val Ile Arg Phe Asp Arg
 50 55 60
 Asn Ala Ala Val Ile Leu Asn Ala Asn Asn Gln Pro Val Gly Thr Arg
 65 70 75 80
 Ile Phe Gly Pro Val Thr Arg Glu Leu Arg Asn Glu Asn Phe Met Lys
 85 90 95
 Ile Val Ser Leu Ala Pro Glu Val Leu
 100 105

<210> 2173
 <211> 475
 <212> DNA
 <213> Homo sapiens

<400> 2173
 nntggggaag aaatgccggt gcatgcactt tgtgcagcat taggtgcagg ggtgatgcag
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 cgggcgcggtg ccttttgctg cggggtttcg agcattcatc tggatgcacg attttcgcat
 120
 gcattttctg taccctcgtc atgcgtttct ccccatgcac acacattatc gcctttgcac
 180
 ccgcaggagac gcatggaata cctcgtgaaa tggaagggat ggtcgcagaa gtacagcaca
 240
 tgggaaccgg aggaaaacat cctggatgct cgcttgctcg cagcctttga ggaaagggaa
 300
 agagagatgg agctctatgg ccccaaaaag cgtggaccca agcccaaac cttcctcctc
 360
 aaagcgcagg ccaaggcaaa ggccaaaact tacgagtttc gaagtgactc agccaggggc
 420
 atccggatcc cctaccctgg ccgctcgccc caggacctgg cctccacttc ccggg
 475

<210> 2174
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 2174
 Xaa Gly Glu Glu Met Pro Val His Ala Leu Cys Ala Ala Leu Gly Ala
 1 5 10 15
 Gly Val Met Gln Arg Ala Arg Ala Phe Cys Gly Gly Val Ser Ser Ile
 20 25 30
 His Leu Val His Ala Phe Ser His Ala Phe Leu Val Ser Ser Ser Cys
 35 40 45
 Val Ser Pro His Ala His Thr Leu Ser Pro Leu His Pro Gln Gly Arg
 50 55 60
 Met Glu Tyr Leu Val Lys Trp Lys Gly Trp Ser Gln Lys Tyr Ser Thr
 65 70 75 80
 Trp Glu Pro Glu Glu Asn Ile Leu Asp Ala Arg Leu Leu Ala Ala Phe
 85 90 95
 Glu Glu Arg Glu Arg Glu Met Glu Leu Tyr Gly Pro Lys Lys Arg Gly
 100 105 110
 Pro Lys Pro Lys Thr Phe Leu Leu Lys Ala Gln Ala Lys Ala Lys Ala
 115 120 125
 Lys Thr Tyr Glu Phe Arg Ser Asp Ser Ala Arg Gly Ile Arg Ile Pro
 130 135 140
 Tyr Pro Gly Arg Ser Pro Gln Asp Leu Ala Ser Thr Ser Arg
 145 150 155

<210> 2175
 <211> 462
 <212> DNA
 <213> Homo sapiens

<400> 2175
 cgcgacaccc tctttggtgg gcgccttctt tctccgaatt cgcgaaacct ccagactctg
 60
 gcccaggagg ttgtcgagcg tggagccgat atcggcattg cactgatgg tgacgcagac
 120
 cgctcggtta tcattgatga ccaggggcat ttcttgcatc ccaaccagat cctcgatttg
 180
 ctgtacacct accttctgga ggacaaggga tggcaggtgc cctgcgtgcg taacctcgcg
 240
 acgaccaccc tgcttgaccg tgtcgccgag gccacgggc agacctgtta cgaggtaccg
 300
 gtcggattta agtgggtgtc gtccaagatg gccgagacca acgccgtcat cggtggtgag
 360
 tctccggtg gtttgaccgt ccaggggcat attgcaggca aggatgggtg ctatgctggc
 420
 accctgctgg tggaaatgat cgccaagcgg ggtaagaagc tt
 462

<210> 2176
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 2176
 Arg Asp Thr Leu Phe Gly Gly Arg Leu Pro Ser Pro Asn Ser Arg Thr
 1 5 10 15
 Leu Gln Thr Leu Ala Gln Glu Val Val Glu Arg Gly Ala Asp Ile Gly
 20 25 30
 Ile Ala Thr Asp Gly Asp Ala Asp Arg Leu Gly Ile Ile Asp Asp Gln
 35 40 45
 Gly His Phe Leu His Pro Asn Gln Ile Leu Val Leu Leu Tyr Thr Tyr
 50 55 60
 Leu Leu Glu Asp Lys Gly Trp Gln Val Pro Cys Val Arg Asn Leu Ala
 65 70 75 80
 Thr Thr His Leu Leu Asp Arg Val Ala Glu Ala His Gly Gln Thr Cys
 85 90 95
 Tyr Glu Val Pro Val Gly Phe Lys Trp Val Ser Ser Lys Met Ala Glu
 100 105 110
 Thr Asn Ala Val Ile Gly Gly Glu Ser Ser Gly Gly Leu Thr Val Gln
 115 120 125
 Gly His Ile Ala Gly Lys Asp Gly Val Tyr Ala Gly Thr Leu Leu Val
 130 135 140
 Glu Met Ile Ala Lys Arg Gly Lys Lys Leu
 145 150

<210> 2177
 <211> 478
 <212> DNA
 <213> Homo sapiens

<400> 2177
 ctcgagaatc atgacggcga cgacgtgact atctccaccc gtgtgcctcg tgacggcggg
 60

accttggaact cgattgtcgg cgtgctggcc ggggcatcct ggtatcagcg ggagatccac
 120
 gacttttttg gtgtgaggtt tgtcgccct ggggcagatg atcgtgccct ccttgtccac
 180
 gatgcaccga aaccgcccct gcgcaaggaa gctgtgttgg cgcagcgagc tgacaccgtg
 240
 tggccgggtg cggctgacca ggctggctcg aagtcgcga gtcgacgtct gccggtcggc
 300
 gttcctgacc ctgagacgtg gcggcgtatc aaagacggcg aggatattcc ggatgccgag
 360
 gtcacgcgg ccatgtcttg ccggcgcccg cgatcagctg cccgtcgaat ggcaagcacg
 420
 gcgtcaggca ggcaggcatg agacattcga ctatcaacct tgacgtcgac gcgtgcac
 478

<210> 2178

<211> 146

<212> PRT

<213> Homo sapiens

<400> 2178

Leu	Glu	Asn	His	Asp	Gly	Asp	Asp	Val	Thr	Ile	Ser	Thr	Arg	Val	Pro
1				5				10					15		
Arg	Asp	Gly	Gly	Thr	Leu	Asp	Ser	Ile	Val	Gly	Val	Leu	Ala	Gly	Ala
			20					25					30		
Ser	Trp	Tyr	Gln	Arg	Glu	Ile	His	Asp	Phe	Phe	Gly	Val	Arg	Phe	Val
		35				40					45				
Gly	Pro	Gly	Ala	Asp	Asp	Arg	Ala	Leu	Leu	Val	His	Asp	Ala	Pro	Lys
	50				55					60					
Pro	Pro	Leu	Arg	Lys	Glu	Ala	Val	Leu	Ala	Gln	Arg	Ala	Asp	Thr	Val
65				70						75				80	
Trp	Pro	Gly	Ala	Ala	Asp	Gln	Ala	Gly	Ser	Lys	Ser	Ala	Ser	Arg	Arg
			85					90						95	
Leu	Pro	Val	Gly	Val	Pro	Asp	Pro	Glu	Thr	Trp	Arg	Arg	Ile	Lys	Asp
			100					105					110		
Gly	Glu	Asp	Ile	Pro	Asp	Ala	Glu	Val	Ile	Ala	Ala	Met	Ser	Gly	Arg
		115				120						125			
Arg	Pro	Arg	Ser	Ala	Ala	Arg	Arg	Met	Ala	Ser	Thr	Ala	Ser	Gly	Arg
	130					135						140			
Gln	Ala														
145															

<210> 2179

<211> 296

<212> DNA

<213> Homo sapiens

<400> 2179

gtgcacttcc gagtggacgt cgagcgtcgc attaacgggg ccggcgcggt gggcgcacac
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 aagacgtcga tgctgcagga tctggacncc gaccgcgcga tggagatcga cccgctcgtc
 120
 tccgtcgttc aggagatggg acgcctggcc aacgtgccga cgcccacgct cgatgtcgtg
 180

ctcccactga tcaagcaacg tgaattcatg acgaagccgg atgccgtggc ggccgcgcag
 240
 gaacgtctgg ctaaagcggc ataaaccagc cgccgaaacc agcggcataa cgcggn
 296

<210> 2180
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 2180
 Val His Phe Arg Val Asp Val Glu Arg Arg Ile Asn Gly Ala Gly Ala
 1 5 10 15
 Val Gly Ala His Lys Thr Ser Met Leu Gln Asp Leu Asp Xaa Asp Arg
 20 25 30
 Ala Met Glu Ile Asp Pro Leu Val Ser Val Val Gln Glu Met Gly Arg
 35 40 45
 Leu Ala Asn Val Pro Thr Pro Thr Leu Asp Val Val Leu Pro Leu Ile
 50 55 60
 Lys Gln Arg Glu Phe Met Thr Lys Pro Asp Ala Val Ala Ala Ala Gln
 65 70 75 80
 Glu Arg Leu Ala Lys Ala Ala
 85

<210> 2181
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 2181
 ngcgcgccgg gatggatcat agtctggctc gatgcatcac gtgcgcgcac gcgcgcgctg
 60
 tcgattcccg acggcatgat cgcggcactc gaccgtaccg gcaaggcgca aacgcacctc
 120
 acgctggcat cgccggaagc ggggtgtcgtc agcgaactga acgtgcgcga cgggtgcgatg
 180
 gtcgcgcggg ggcagacgct cgccaagatt tcgggcctct cgaagctctg gctgatcgctc
 240
 gagattccgg aagcgctcgc gctcgatgcg cgtccgggca tgaccgtcga cgcgacgttc
 300
 tcgggcgatc cgacgcagca tttcaccggg cgtatccgcg agatcctgcc gggcatcacc
 360
 accagtagcc gcacgcttca ggcgcgc
 387

<210> 2182
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 2182
 Xaa Ala Pro Gly Trp Ile Ile Val Trp Leu Asp Ala Ser Arg Ala Arg
 1 5 10 15
 Met Arg Ala Leu Ser Ile Pro Asp Gly Met Ile Ala Ala Leu Asp Arg

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<210> 2183
<211> 310
<212> DNA
<213> Homo sapiens
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```
<210> 2184
<211> 100
<212> PRT
<213> Homo sapiens
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1616

100

<210> 2185
 <211> 723
 <212> DNA
 <213> Homo sapiens

<400> 2185
 ngaatatcca tgcagcagct cgtcgacaat tttgacggtg ccatccctga cgatcttgac
 60
 tctcttgtga ccctgcccgg agtcggctgt aagaccgcca atgttgtttt aggtaatgcc
 120
 ttcggcatcc ccggaatcac cccggacacc cacgtcatgc gggatatctcg acgtctgggc
 180
 tggaccgatg cgactacccc cgccaagggtg gaaaccgacc tggctgagct ttttgaccgg
 240
 tctgaatggg tgatgttggt tcaccgcctc atctggcacg ggcggcggcg ctgtcactcg
 300
 cggcgctctg cctgcgggggt atgcccgggt gccgagtggt gcccgctcctt cggggaaggc
 360
 ccaacggatc ccgaggaggc cgccacgtta gtccgggagc cgcgctcgatg agggggatga
 420
 acgttttcgg cgcggtgatg gccgccttga tgtttgctgg ctgcggggga gatgcgggca
 480
 tagctcatca gcgtgaaaat gcgggaatac cggggtgctc gcatttgccg tcggggccga
 540
 ttgcgaaaag ttccggggccg gccacagagg gccggcccat gcccgatcac ggcttgcaat
 600
 gccttggtga ggggcccagc atctccatgt ctcgggcgac atcgaggggc gtgaccgtcg
 660
 tgacgatctg ggcgtcgtgg tgctgaccat gtcgtagtga ggctccgctc attgcgaacg
 720
 cgt
 723

<210> 2186
 <211> 136
 <212> PRT
 <213> Homo sapiens

<400> 2186
 Xaa Ile Ser Met Gln Gln Leu Val Asp Asn Phe Asp Gly Ala Ile Pro
 1 5 10 15
 Asp Asp Leu Asp Ser Leu Val Thr Leu Pro Gly Val Gly Arg Lys Thr
 20 25 30
 Ala Asn Val Val Leu Gly Asn Ala Phe Gly Ile Pro Gly Ile Thr Pro
 35 40 45
 Asp Thr His Val Met Arg Val Ser Arg Arg Leu Gly Trp Thr Asp Ala
 50 55 60
 Thr Thr Pro Ala Lys Val Glu Thr Asp Leu Ala Glu Leu Phe Asp Pro
 65 70 75 80
 Ser Glu Trp Val Met Leu Cys His Arg Leu Ile Trp His Gly Arg Arg
 85 90 95
 Arg Cys His Ser Arg Arg Pro Ala Cys Gly Val Cys Pro Val Ala Glu

	100		105		110										
Trp	Cys	Pro	Ser	Phe	Gly	Glu	Gly	Pro	Thr	Asp	Pro	Glu	Glu	Ala	Ala
	115					120						125			
Thr	Leu	Val	Arg	Glu	Pro	Arg	Arg								
	130					135									

<210> 2187
 <211> 342
 <212> DNA
 <213> Homo sapiens

<400> 2187
 nnacgcgtga aggatgcgcc ccggctcgacc ggccatccgt cttgcctcgc aggcattccag
 60
 cccgccatat gctgcaaccg caacaccgct ttgccgtcgc atggcatctc cactccggat
 120
 cgcctcgatc caccgagggt atcggcgcca aagaagttgc cggggcaaaa tcccggcgag
 180
 gaaagcccca tggagtggaa gacgctgctc aacgacaccc gcttcggagg ggtcgccagc
 240
 ctcatgagga cgcgcggacg gtcggagtgc cagaaggacc acgaccggat catcttctcc
 300
 gaagccttcc gcaagctggg ccgcaagacc cagggtgcacc cg
 342

<210> 2188
 <211> 51
 <212> PRT
 <213> Homo sapiens

<400> 2188
 Met Glu Trp Lys Thr Leu Leu Asn Asp Thr Arg Phe Gly Gly Val Ala
 1 5 10 15
 Ser Leu Asp Gly Thr Arg Gly Arg Ser Glu Phe Gln Lys Asp His Asp
 20 25 30
 Arg Ile Ile Phe Ser Glu Ala Phe Arg Lys Leu Gly Arg Lys Thr Gln
 35 40 45
 Val His Pro
 50

<210> 2189
 <211> 1412
 <212> DNA
 <213> Homo sapiens

<400> 2189
 ntcgcttcat ggtgcgcaat tacgacaacg ccaagtctca gaatgccgag gcttacaccg
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 cgttcttcca cgcgatgcta gatgccgggg tcaacctgcc gccatcgtgc tttgaggcct
 120
 ggttcctctc ggacgctcac gacgacgaag ctttcgaggt tttccgcgcc gccctgccga
 180
 gggctgcccc ggccggctgcc cagggtgatca gtgcctgaca ccgggctgac ttgcaggtc
 240

atcgaggcaa tctgtgcctg gttcgacgcc aacggacgcg atctgccgtg gcgccgaccc
 300
 ggcacctccg cgtggggcgt gcttgtagc gaggtcatga gccaacagac cccgatgtcc
 360
 cgggtgatcg ggccgtggca cgagtggatg aaccgctggc ccacccctga tgatttggcg
 420
 gaggaggact ctggggaagc ggttgccgcg tgggggcgcc tgggttaccg gcgtcgggcc
 480
 ttacgcctgc attcctgtgc cgtcacgac gccaccgagc acgacggggg tgtgcccac
 540
 agtgacgacg agctcgtcgc cctcccgggt attggcgact acaccgagc cgagtcgtc
 600
 tcttttgcgt ttggcggccg cgccacagt cttgacacca atgtacgtcg cctcatcgt
 660
 agagcagagt ctgggatcgc aaactgtcca acctcgggtga cgagggctga gcgggtagtc
 720
 gccgacgcgt tggttcccg cgaagacgtc cgagcggcca agtggggcgt ggctcgatg
 780
 gaattggggg cactggtatg cacggcgcg tctccgcagt gtgaggtctg cccgatccg
 840
 gatggctgca ggtgggtgat cgacggtagg ccggacaatg ccccgcccg tcgaggacag
 900
 ccatggaagg gcacggatcg ccagtgccg gccgtgatta tggacgtggt gcgcaacagc
 960
 cctcacgggg tgaaggtcca gatggtctt tccgcctggc ccgagctcga tcaggcatca
 1020
 aggtgcctgg aatccttact cgatgacggt ttagtgcacc gacgaggtaa cttatttagc
 1080
 ctgtgacctg agaaattctt ggccccgacc acccaaacag accgagtcca gcagtgatgc
 1140
 cgctgggtta tccttagagg cggctcctca attggatcag ccaaaccacg tcaccgatca
 1200
 agacaccatg agcacaacac ccaaacagcc gcgcacggcg acagctgcc gacgccgaca
 1260
 cattgtcgac catctgcgtt ctttggggca ctcggagtcc atcggagatc tttaccaact
 1320
 gttcgggtgc tctacatcga cgattcggc cgatgtcgat gccctctcgg atgaatccaa
 1380
 gatctggaag atttccgggg gagacgtcat ga
 1412

<210> 2190

<211> 292

<212> PRT

<213> Homo sapiens

<400> 2190

Ser	Val	Pro	Asp	Thr	Gly	Leu	Thr	Ser	Gln	Val	Ile	Glu	Ala	Ile	Cys
1				5				10						15	
Ala	Trp	Phe	Asp	Ala	Asn	Gly	Arg	Asp	Leu	Pro	Trp	Arg	Arg	Pro	Gly
			20				25						30		
Thr	Ser	Ala	Trp	Gly	Val	Leu	Val	Ser	Glu	Val	Met	Ser	Gln	Gln	Thr
		35				40					45				
Pro	Met	Ser	Arg	Val	Ile	Gly	Pro	Trp	His	Glu	Trp	Met	Asn	Arg	Trp

50	55	60
Pro Thr Pro Asp Asp Leu Ala Glu Glu Asp Ser Gly Glu Ala Val Ala		
65	70	75
Ala Trp Gly Arg Leu Gly Tyr Pro Arg Arg Ala Leu Arg Leu His Ser		80
	85	90
Cys Ala Val Thr Ile Ala Thr Glu His Asp Gly Gly Val Pro Asn Ser		95
	100	105
Asp Asp Glu Leu Val Ala Leu Pro Gly Ile Gly Asp Tyr Thr Ala Ser		110
	115	120
Ala Val Val Ser Phe Ala Phe Gly Gly Arg Ala Thr Val Leu Asp Thr		125
	130	135
Asn Val Arg Arg Leu Ile Ala Arg Ala Glu Ser Gly Ile Ala Asn Cys		140
145	150	155
Pro Thr Ser Val Thr Arg Ala Glu Arg Val Val Ala Asp Ala Leu Val		160
	165	170
Pro Asp Glu Asp Val Arg Ala Ala Lys Trp Ala Val Ala Ser Met Glu		175
	180	185
Leu Gly Ala Leu Val Cys Thr Ala Arg Ser Pro Gln Cys Glu Val Cys		190
	195	200
Pro Ile Arg Asp Gly Cys Arg Trp Val Ile Asp Gly Arg Pro Asp Asn		205
	210	215
Ala Pro Ala Arg Arg Gly Gln Pro Trp Lys Gly Thr Asp Arg Gln Cys		220
225	230	235
Arg Gly Val Ile Met Asp Val Val Arg Asn Ser Pro His Gly Val Lys		240
	245	250
Val Gln Met Ala Leu Ser Ala Trp Pro Glu Leu Asp Gln Ala Ser Arg		255
	260	265
Cys Leu Glu Ser Leu Leu Asp Asp Gly Leu Val His Arg Arg Gly Asn		270
	275	280
Leu Ile Ser Leu		285
290		

<210> 2191

<211> 502

<212> DNA

<213> Homo sapiens

<400> 2191

nnacgcgtcg agaattctcta ctctgccccg aacaacgtcc ggcttcgtca ggctcacgat

60

gactcccttg acgacgacac catttcgggg ggtagccac attggtgctg cctcatggac

120

tacattgaat cccgttcaat cctgaacggc gttcaggacg tctccagtct cggaaggacc

180

agagtattgc tgaattctagc cgacatgacc gaacgcggcc tgagggggga gtccattacc

240

cgcgaggagg ccctcgagat tcttcgcagc agtgatgatg agctcatgtc aatcatcgcc

300

gccgccggaa aagtgcgtcg ccactttttc gataaccggg ttgcctcaa ctacctggtc

360

aacctcaagt ccggcctgtg tcccgaagac tgctcctatt gctcgcagcg tctgggatcg

420

cgtgccgaga tcacgaaata ctctggggcc gatccgcaga aggtacacga cgccgtcgag

480

gctgggattg ccggtggtgc ac
502

<210> 2192
<211> 104
<212> PRT
<213> Homo sapiens

<400> 2192
Leu Asn Leu Ala Asp Met Thr Glu Arg Gly Leu Arg Gly Glu Ser Ile
1 5 10 15
Thr Arg Glu Glu Ala Leu Glu Ile Leu Arg Ser Ser Asp Asp Glu Leu
20 25 30
Met Ser Ile Ile Ala Ala Ala Gly Lys Val Arg Arg His Phe Phe Asp
35 40 45
Asn Arg Val Arg Leu Asn Tyr Leu Val Asn Leu Lys Ser Gly Leu Cys
50 55 60
Pro Glu Asp Cys Ser Tyr Cys Ser Gln Arg Leu Gly Ser Arg Ala Glu
65 70 75 80
Ile Thr Lys Tyr Ser Trp Ala Asp Pro Gln Lys Val His Asp Ala Val
85 90 95
Glu Ala Gly Ile Ala Gly Gly Ala
100

<210> 2193
<211> 321
<212> DNA
<213> Homo sapiens

<400> 2193
ccatggggaa tgcagagcac ggacagtcac acagactgtc ctctctggcc ttctggaccc
60
aacatactcc tcttgccaac tgggtattac tggaccttac tgggccttac tggacccaac
120
atactcctct tgccaactgg ggatttaaaa attttaaaag cccctttatc tccctccaca
180
agtcattgtac tgccaacagg gacacactgt tttctttgga aaccctgctg tgtgcccaga
240
cagagggtccc actgccctgg gacagctccc ttgcctanag gggaaggagg gtgtgtgtgc
300
tgtgtgtgtt taggttgggg a
321

<210> 2194
<211> 106
<212> PRT
<213> Homo sapiens

<400> 2194
Met Gly Asn Ala Glu His Gly Gln Ser His Arg Leu Ser Ser Leu Ala
1 5 10 15
Phe Trp Thr Gln His Thr Pro Leu Ala Asn Trp Val Leu Leu Asp Leu
20 25 30
Thr Gly Pro Tyr Trp Thr Gln His Thr Pro Leu Ala Asn Trp Gly Phe

```

      35              40              45
Lys Asn Phe Lys Ser Pro Phe Ile Ser Leu His Lys Ser Cys Thr Ala
      50              55              60
Asn Arg Asp Thr Leu Phe Ser Leu Glu Thr Leu Leu Cys Ala Gln Thr
65              70              75              80
Glu Val Pro Leu Pro Trp Asp Ser Ser Leu Ala Xaa Arg Gly Arg Arg
      85              90              95
Val Cys Val Leu Cys Val Phe Arg Leu Gly
      100              105

```

<210> 2195

<211> 504

<212> DNA

<213> Homo sapiens

<400> 2195

```

naccggtctc cctacatcaa tgcccaccgc gattgcacct ttgttgatcat gtcacctggc
60
gacgggtgtgg cacaccccaa ctttggaat atcgctccacg acctgggtgct gttgcacagc
120
ctgggtgtgc gtctggtact ggtccacggt tcgcgcccgc agatcgacag ccgccttgag
180
gcacgaggcc tgggtgccga ttaccacaag ggcattgctg tcaccgatgc atcaacgctc
240
gaatgcgtga tcgatgctgt cgggcaactg cgcattgcga ttgaagcgcg cttgtcgatg
300
gacatggcgt cttcgccaat gcagggttcg cgtctgcgcg tagccagcgg caacctggtc
360
actgcgcggc cgcacggcgt gtcgacggt gtggattttc accataccgg cgaagtgcgc
420
cgggtggacc gcaagggcat caaccgcctg ctcgatgagc gtcgattgt gctgctgtcg
480
cccttgggtt actcgccac cggt
504

```

<210> 2196

<211> 168

<212> PRT

<213> Homo sapiens

<400> 2196

```

Xaa Ala Ser Pro Tyr Ile Asn Ala His Arg Asp Cys Thr Phe Val Val
1              5              10              15
Met Leu Pro Gly Asp Gly Val Ala His Pro Asn Phe Gly Asn Ile Val
      20              25              30
His Asp Leu Val Leu Leu His Ser Leu Gly Val Arg Leu Val Leu Val
      35              40              45
His Gly Ser Arg Pro Gln Ile Asp Ser Arg Leu Glu Ala Arg Gly Leu
      50              55              60
Val Pro Tyr Tyr His Lys Gly Met Arg Val Thr Asp Ala Ser Thr Leu
65              70              75              80
Glu Cys Val Ile Asp Ala Val Gly Gln Leu Arg Ile Ala Ile Glu Ala
      85              90              95
Arg Leu Ser Met Asp Met Ala Ser Ser Pro Met Gln Gly Ser Arg Leu

```

```

      100              105              110
Arg Val Ala Ser Gly Asn Leu Val Thr Ala Arg Pro Ile Gly Val Leu
      115              120              125
Asp Gly Val Asp Phe His His Thr Gly Glu Val Arg Arg Val Asp Arg
      130              135              140
Lys Gly Ile Asn Arg Leu Leu Asp Glu Arg Ser Ile Val Leu Leu Ser
145              150              155              160
Pro Leu Gly Tyr Ser Pro Thr Gly
      165

```

<210> 2197

<211> 351

<212> DNA

<213> Homo sapiens

<400> 2197

```

acaagtcctg cgacgattcg ctttccggag gcggggccag gaatggtaat gaaacccgag
60
ttatggggcc ctgcgctcga cgagattgcc gcgggaaaac gtgccggagg ggctgaacag
120
ttagattccg cagtgcagca catccacggt gctactcacg ataaactgtc cgggtgctgtt
180
ccgaaacgct acgatggtcg ggatgtcttg gcaggcgagg acccgaatgc accgttgctg
240
cttgtgccta gcccggtcgg tgcagtgttt agtcaaaata aggcacaagc ctgggtccaat
300
gaagaccaca ttgtttttgc ctgtgggcgc tatgaaggta ttgatcaacg c
351

```

<210> 2198

<211> 117

<212> PRT

<213> Homo sapiens

<400> 2198

```

Thr Ser Pro Ser Thr Ile Arg Phe Pro Glu Ala Gly Pro Gly Met Val
  1              5              10              15
Met Lys Pro Glu Leu Trp Gly Pro Ala Leu Asp Glu Ile Ala Ala Gly
      20              25              30
Lys Arg Ala Gly Gly Ala Glu Gln Leu Asp Ser Ala Val Gln His Ile
      35              40              45
His Gly Ala Thr His Asp Lys Leu Ser Gly Ala Val Pro Lys Arg Tyr
      50              55              60
Asp Gly Arg Asp Val Leu Ala Gly Glu Asp Pro Asn Ala Pro Leu Leu
      65              70              75              80
Leu Val Pro Ser Pro Ala Gly Ala Val Phe Ser Gln Asn Lys Ala Gln
      85              90              95
Ala Trp Ser Asn Glu Asp His Ile Val Phe Ala Cys Gly Arg Tyr Glu
      100              105              110
Gly Ile Asp Gln Arg
      115

```

<210> 2199

<211> 457

<212> DNA

<213> Homo sapiens

<400> 2199

agacgccggc cgccaagatc tgcattcccta ggccacgcta agaccctggg gaagagcgca
 60
 ggagcccggg agaagggctg gaaggagggg actggacgtg cggagaattc cccctaaaa
 120
 ggacagaagcc cccgccccca ccctccgagc tccgttcggg cagagcgctt gctgcctgc
 180
 cggttgctggg ggagccccacc tcgcccagcc atgccaggcc cggccaccga cgcggggaag
 240
 atccctttct gcgacgcaa ggaagaaatc cgtgccgggc tcgaaagctc tgagggcggc
 300
 ggagggcccg agaggccagg cgcgcgaggg cagcggcaga acatcgtctg gaggaatgtc
 360
 gtcttgatga gcttgctcca ctggggggcc gtgtactccc tgggtgctcat ccccaaagcc
 420
 aagccactca ctctgctctg gggtaagtcc cgcggg
 457

<210> 2200

<211> 152

<212> PRT

<213> Homo sapiens

<400> 2200

Arg	Arg	Arg	Pro	Pro	Arg	Ser	Ala	Ser	Leu	Gly	His	Ala	Lys	Thr	Leu
1				5					10					15	
Gly	Lys	Ser	Ala	Gly	Ala	Arg	Glu	Lys	Gly	Trp	Lys	Glu	Gly	Thr	Gly
			20					25					30		
Arg	Ala	Glu	Asn	Ser	Pro	Leu	Lys	Gly	Arg	Ser	Pro	Arg	Pro	His	Pro
			35					40					45		
Pro	Ser	Ser	Val	Arg	Ala	Glu	Arg	Leu	Pro	Ala	Cys	Arg	Cys	Trp	Gly
	50					55					60				
Arg	Pro	Pro	Arg	Pro	Ala	Met	Pro	Gly	Pro	Ala	Thr	Asp	Ala	Gly	Lys
65					70					75				80	
Ile	Pro	Phe	Cys	Asp	Ala	Lys	Glu	Glu	Ile	Arg	Ala	Gly	Leu	Glu	Ser
			85						90					95	
Ser	Glu	Gly	Gly	Gly	Gly	Pro	Glu	Arg	Pro	Gly	Ala	Arg	Gly	Gln	Arg
			100					105					110		
Gln	Asn	Ile	Val	Trp	Arg	Asn	Val	Val	Leu	Met	Ser	Leu	Leu	His	Leu
	115					120						125			
Gly	Ala	Val	Tyr	Ser	Leu	Val	Leu	Ile	Pro	Lys	Ala	Lys	Pro	Leu	Thr
	130					135						140			
Leu	Leu	Trp	Gly	Lys	Ser	Arg	Arg								
145						150									

<210> 2201

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2201

agtactgcga tggacagcta tgtcgtggat ggtggtcgca aattacatgt ttgtggtaac
 60
 aaccttgatt gcgatgggta tgaagtcgaa gaaggcgaat tcaagatcaa ggggttatgat
 120
 ggtccgacta tcccatgcga taaatgtgat ggtgagatgc agcttaaaac gggtcgtttt
 180
 ggtccatatt tcgcatgtac tagctgtgac aatactcgta aggtactcaa gagtgggtcaa
 240
 cctgctccgc cacgtgtaga cccaatcaaa atggagcatc tacgttcaac gaagcatgat
 300
 gatttcttcg tcttacgtga gggcgctgct ggttta
 336

<210> 2202

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2202

Ser	Thr	Ala	Met	Asp	Ser	Tyr	Val	Val	Asp	Gly	Gly	Arg	Lys	Leu	His
1			5						10					15	
Val	Cys	Gly	Asn	Pro	Asp	Cys	Asp	Gly	Tyr	Glu	Val	Glu	Glu	Gly	
		20					25				30				
Glu	Phe	Lys	Ile	Lys	Gly	Tyr	Asp	Gly	Pro	Thr	Ile	Pro	Cys	Asp	Lys
		35				40					45				
Cys	Asp	Gly	Glu	Met	Gln	Leu	Lys	Thr	Gly	Arg	Phe	Gly	Pro	Tyr	Phe
	50					55					60				
Ala	Cys	Thr	Ser	Cys	Asp	Asn	Thr	Arg	Lys	Val	Leu	Lys	Ser	Gly	Gln
	65				70				75				80		
Pro	Ala	Pro	Pro	Arg	Val	Asp	Pro	Ile	Lys	Met	Glu	His	Leu	Arg	Ser
			85					90					95		
Thr	Lys	His	Asp	Asp	Phe	Phe	Val	Leu	Arg	Glu	Gly	Ala	Ala	Gly	Leu
			100				105						110		

<210> 2203

<211> 273

<212> DNA

<213> Homo sapiens

<400> 2203

ctcgagagat gcagtcaccag ccgggggtggg aagctgtgca gacagccccg gatctggggac
 60
 gtgatggaaa actcaacaga ctggttcaga tcttggcccc gagcccagag gcaccggggga
 120
 cccccagggc tgtttctccc tggccacacc agtaccacac ttccaaatgc cctgtagggtg
 180
 accaccaggc cacacaggcc cgtctgaggg gccacaggct gtgcaccatg ggacgcaggc
 240
 ctgtccctgc ctccctccga tgcctgatg gtg
 273

<210> 2204

<211> 88

<212> PRT

<213> Homo sapiens

<400> 2204

```

Met Gln Ser Gln Pro Gly Trp Glu Ala Val Gln Thr Ala Pro Asp Leu
 1             5             10             15
Gly Arg Asp Gly Lys Leu Asn Arg Leu Val Gln Ile Leu Ala Arg Ser
      20             25             30
Pro Glu Ala Pro Gly Thr Pro Arg Ala Val Ser Pro Trp Pro His Gln
      35             40             45
Tyr Pro Thr Ser Lys Cys Pro Val Gly Asp His Gln Ala Thr Gln Ala
      50             55             60
Arg Leu Arg Gly His Arg Leu Cys Thr Met Gly Arg Arg Pro Val Pro
      65             70             75             80
Ala Ser Leu Arg Cys Pro Asp Gly
                        85

```

<210> 2205

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2205

```

gnnnnnggng nnnnactggt gtgcatgggt aaaatcctgc aagctactgg gttgccacag
60
catctgtccc actttgtggt ctgcaaatac agcttctggg atcaacagga gccggtgatt
120
gtcgtcctcg aagtggacac ctctcctctt tccgtcagca aggagccgca ctgcatgggt
180
gtctttgatc attgcaatga gttttctggt aacatcaccg aagactttat cgagcatctt
240
tccgaaggag cattggcaat tgaagtatat ggacataaaa taaacgatcc ccggaaaaac
300
cccgccctgt gggatttggg aatcatccaa gcaaagacac gtagtcttcg ggacagatgg
360
agtgaagtgc ccaggaaatt ggaattc
387

```

<210> 2206

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2206

```

Xaa Xaa Gly Xaa Xaa Leu Val Cys Met Val Lys Ile Leu Gln Ala Thr
 1             5             10             15
Gly Leu Pro Gln His Leu Ser His Phe Val Phe Cys Lys Tyr Ser Phe
      20             25             30
Trp Asp Gln Gln Glu Pro Val Ile Val Ala Pro Glu Val Asp Thr Ser
      35             40             45
Ser Ser Ser Val Ser Lys Glu Pro His Cys Met Val Val Phe Asp His
      50             55             60
Cys Asn Glu Phe Ser Val Asn Ile Thr Glu Asp Phe Ile Glu His Leu
      65             70             75             80
Ser Glu Gly Ala Leu Ala Ile Glu Val Tyr Gly His Lys Ile Asn Asp

```

				85						90					95				
Pro	Arg	Lys	Asn	Pro	Ala	Leu	Trp	Asp	Leu	Gly	Ile	Ile	Gln	Ala	Lys				
			100					105					110						
Thr	Arg	Ser	Leu	Arg	Asp	Arg	Trp	Ser	Glu	Val	Pro	Arg	Lys	Leu	Glu				
		115					120						125						
Phe																			

<210> 2207

<211> 667

<212> DNA

<213> Homo sapiens

<400> 2207

```

atctccaacc ccgagaccct ctccaatata gccggcttcg agggctacat cgacctgggc
60
cgcgagctct ccagcctgca ctactgtctc tgggaggccg tcagccagct ggagcagagc
120
atagtatcca aactgggacc cctgcctcgg atcctgaggg acgtccacac agcactgagc
180
accccaggta gcgggcagct cccagggacc aatgacctgg cctccacacc gggctctggc
240
agcagcagca tctcagctgg gctgcagaag atgggtgattg agaacgatct ttccggtctg
300
atagatttca cccggttacc gtctccaacc cccgaaaaca aggacttgtt ttttgtcaca
360
aggctctccg gggctccagc ctcacctgcc cgcagctcga gttactcgga agccaacgag
420
cctgatcttc agatggccaa cgggtggcaag agcctctcca tgggtggacct ccaggacgcc
480
cgcacgctgg atggggaggc aggtctccccg gcggggccccg acgtctctcc cacagatggg
540
caggccgctg cagctcagct ggtggccggg tggccggccc gggcaacccc agtgaacctg
600
gcagggtcgg ccacgggtgcg gcgggcaggc cagacaccaa ccacaccagg cacctccgag
660
ggcgcgcg
667

```

<210> 2208

<211> 222

<212> PRT

<213> Homo sapiens

<400> 2208

Ile	Ser	Asn	Pro	Glu	Thr	Leu	Ser	Asn	Thr	Ala	Gly	Phe	Glu	Gly	Tyr				
1				5					10					15					
Ile	Asp	Leu	Gly	Arg	Glu	Leu	Ser	Ser	Leu	His	Ser	Leu	Leu	Trp	Glu				
		20					25				30								
Ala	Val	Ser	Gln	Leu	Glu	Gln	Ser	Ile	Val	Ser	Lys	Leu	Gly	Pro	Leu				
		35				40					45								
Pro	Arg	Ile	Leu	Arg	Asp	Val	His	Thr	Ala	Leu	Ser	Thr	Pro	Gly	Ser				
	50				55					60									
Gly	Gln	Leu	Pro	Gly	Thr	Asn	Asp	Leu	Ala	Ser	Thr	Pro	Gly	Ser	Gly				

```

65          70          75          80
Ser Ser Ser Ile Ser Ala Gly Leu Gln Lys Met Val Ile Glu Asn Asp
          85          90          95
Leu Ser Gly Leu Ile Asp Phe Thr Arg Leu Pro Ser Pro Thr Pro Glu
          100          105          110
Asn Lys Asp Leu Phe Phe Val Thr Arg Ser Ser Gly Val Gln Pro Ser
          115          120          125
Pro Ala Arg Ser Ser Ser Tyr Ser Glu Ala Asn Glu Pro Asp Leu Gln
          130          135          140
Met Ala Asn Gly Gly Lys Ser Leu Ser Met Val Asp Leu Gln Asp Ala
145          150          155          160
Arg Thr Leu Asp Gly Glu Ala Gly Ser Pro Ala Gly Pro Asp Val Leu
          165          170          175
Pro Thr Asp Gly Gln Ala Ala Ala Ala Gln Leu Val Ala Gly Trp Pro
          180          185          190
Ala Arg Ala Thr Pro Val Asn Leu Ala Gly Leu Ala Thr Val Arg Arg
          195          200          205
Ala Gly Gln Thr Pro Thr Thr Pro Gly Thr Ser Glu Gly Ala
          210          215          220

```

<210> 2209

<211> 353

<212> DNA

<213> Homo sapiens

<400> 2209

```

ngggaagttg gtactagcct cccaaagcca ctctcctgag tgacattgag agcatcctat
60
agagaaggcc atgagagaga tagcactggg acagatgggtg tcagcagagg ggactccaga
120
ccacagcaga agtgaccaag ctgtagcttc cttagatggc cccaagggtg ggagggttca
180
cacagcagag cctgggtctg gaggcacctt ggggatgttt ttccccatta ggcccctgag
240
ctctatggaa gcacttaact gcctgttccc cgcttattct gtgtttaaac caaggaaaca
300
acatgcctgg ggtctgaaat cctggattca aatcctgact gtgttgtgtg ctt
353

```

<210> 2210

<211> 94

<212> PRT

<213> Homo sapiens

<400> 2210

```

Met Arg Glu Ile Ala Leu Gly Gln Met Val Ser Ala Glu Gly Thr Pro
1          5          10          15
Asp His Ser Arg Ser Asp Gln Ala Val Ala Ser Leu Asp Gly Pro Lys
          20          25          30
Gly Gly Arg Leu His Thr Ala Glu Pro Gly Ser Gly Gly Thr Leu Gly
          35          40          45
Met Phe Phe Pro Ile Arg Pro Leu Ser Ser Met Glu Ala Leu Asn Cys
          50          55          60
Leu Phe Pro Ala Tyr Ser Val Phe Lys Pro Arg Lys Gln His Ala Trp

```


<212> DNA

<213> Homo sapiens

<400> 2213

acgcgtccga ccggcagttc cggcagctgc gggaaagctg cgatgcgctc gccgagcatt
 60
 gccggtgctt cgacacactg gggtatatcg ccctcaaagc acaggtctac gaaggttctg
 120
 acggaaggcc cggccaatcc gatcgcggcc tcggcgctgc gcatcatccg ggcgcgctg
 180
 tcgcagctct ggggcacgtc gctgctccgc aacggacggg cggaacagag tgtggtggag
 240
 atcgcccggg ttgtcgacgc gatcacgtca cgggacgagg aagccgcca gcgtgcactg
 300
 ctcgaccaca atcgacgcgc gttggaa
 327

<210> 2214

<211> 95

<212> PRT

<213> Homo sapiens

<400> 2214

Met	Arg	Ser	Pro	Ser	Ile	Ala	Gly	Ala	Ser	Thr	His	Trp	Val	Ile	Ser
1				5					10					15	
Pro	Ser	Lys	His	Arg	Ser	Thr	Lys	Val	Leu	Thr	Glu	Gly	Pro	Ala	Asn
			20					25					30		
Pro	Ile	Ala	Ala	Ser	Ala	Leu	Arg	Ile	Ile	Arg	Ala	Arg	Val	Ser	Gln
		35					40					45			
Leu	Trp	Gly	Thr	Ser	Leu	Leu	Arg	Asn	Gly	Arg	Ala	Glu	Gln	Ser	Val
	50					55				60					
Val	Glu	Ile	Ala	Arg	Leu	Val	Asp	Ala	Ile	Thr	Ser	Arg	Asp	Glu	Glu
65					70				75					80	
Ala	Ala	Gln	Arg	Ala	Leu	Leu	Asp	His	Asn	Arg	Ser	Ala	Leu	Glu	
			85						90					95	

<210> 2215

<211> 430

<212> DNA

<213> Homo sapiens

<400> 2215

ctggggatca tgccctacat cactgcgtcg atcatcctgc agctgctgac agtcgtgac
 60
 ccgaagctgg aaacccttaa gaaggagggc gcgtccggtc agaacaagat caccagtagc
 120
 accggttacc tcaactctcg gcttgacctg ttgcaggcaa cggccttcgt cagccttgcc
 180
 acctccggcc gtctattcac cnntgcagct ntgccagtcg tctactccac ctcggtcttc
 240
 gaagtcgtcg tcatgatcct gactatgacg gccggtacga ccatcgatcat gtggatgggt
 300
 gagctcatca ccgaccgagg tatcggaac ggtatgtcga tcatgatttt cactcagatt
 360

gcggcgcggtt tccctgactc gctgtggtct atcaaggctc ctcgaaatgg cgccggtcag
 420
 gctcacgcgt
 430

<210> 2216
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 2216
 Leu Gly Ile Met Pro Tyr Ile Thr Ala Ser Ile Ile Leu Gln Leu Leu
 1 5 10 15
 Thr Val Val Ile Pro Lys Leu Glu Thr Leu Lys Lys Glu Gly Ala Ser
 20 25 30
 Gly Gln Asn Lys Ile Thr Gln Tyr Thr Arg Tyr Leu Thr Leu Val Leu
 35 40 45
 Gly Leu Leu Gln Ala Thr Ala Phe Val Thr Leu Ala Thr Ser Gly Arg
 50 55 60
 Leu Phe Thr Xaa Ala Ala Xaa Pro Val Val Tyr Ser Thr Ser Val Phe
 65 70 75 80
 Glu Val Val Val Met Ile Leu Thr Met Thr Ala Gly Thr Thr Ile Val
 85 90 95
 Met Trp Met Gly Glu Leu Ile Thr Asp Arg Gly Ile Gly Asn Gly Met
 100 105 110
 Ser Ile Met Ile Phe Thr Gln Ile Ala Ala Arg Phe Pro Asp Ser Leu
 115 120 125
 Trp Ser Ile Lys Val Ala Arg Asn Gly Ala Gly Gln Ala His Ala
 130 135 140

<210> 2217
 <211> 444
 <212> DNA
 <213> Homo sapiens

<400> 2217
 accagggcgc cttcgaagga cctctctcca gctatcgtga cgacgacggc gaagcgggct
 60
 atgacgtggc tcgatgacga cgtgggcgcc gacctgttga atcaggctga ttccatggac
 120
 catgccctgg aggccaccgt cccaggctcg gtcaccacgc cggacgccca agtcattccag
 180
 acctgtgccg tgttgcgtag ccttgctcgc gtggcagtca gccagctggg ccgaaatgac
 240
 gaggactcta gggaaccagt cgatgcggag agagtacagg ctcaagcgnc gatgcgggag
 300
 gttttcgaga ccgccgaacg catggtgggg ctggccgccg ccgacgtggt gtgggtctct
 360
 gagtctgaga agggataccg cagcattcac gtcgtccgc tgagtgttgg cggcttgcta
 420
 cgagagaatg tctttgctca gtcc
 444

<210> 2218

<211> 148

<212> PRT

<213> Homo sapiens

<400> 2218

```

Thr Arg Ala Ala Ser Lys Asp Leu Ser Pro Ala Ile Val Thr Thr Thr
 1           5           10           15
Ala Lys Arg Ala Met Thr Trp Leu Asp Asp Asp Val Gly Ala Asp Leu
      20           25           30
Leu Asn Gln Ala Asp Ser Met Asp His Ala Leu Glu Ala Thr Val Pro
      35           40           45
Gly Arg Val Thr Thr Pro Asp Ala Gln Val Ile Gln Thr Cys Ala Val
      50           55           60
Leu Arg Asp Leu Ala Arg Val Ala Val Ser Gln Leu Gly Arg Asn Asp
65           70           75           80
Glu Asp Ser Arg Glu Pro Val Asp Ala Glu Arg Val Gln Ala Gln Ala
      85           90           95
Xaa Met Arg Glu Val Phe Glu Thr Ala Glu Arg Met Val Gly Leu Ala
      100          105          110
Ala Ala Asp Val Val Trp Val Ser Glu Ser Glu Lys Gly Tyr Arg Ser
      115          120          125
Ile His Val Ala Pro Leu Ser Val Gly Gly Leu Leu Arg Glu Asn Val
      130          135          140
Phe Ala Gln Ser
145

```

<210> 2219

<211> 688

<212> DNA

<213> Homo sapiens

<400> 2219

```

acgcgtaccg tcgttggcat gagcgtcctg ccactggaaa ttggtgtgc attcagctac
60
ggcattacga atatggcgtg gatgtggcta tggttcgacg agcccggaaa ccgttgggag
120
tggtcgatcc ttttccccgc tgggtggctg accagcgctt tggtcagtca ggggttcggt
180
ggaatgttcc atagtgtgca gattgcgcgt catgtcagca gttaccacgg catcatggtc
240
gctttcgcgc tcgttgggta cggatggctt gcgatgcaca acttgcgtca ccctgatgag
300
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600
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688

<210> 2220
<211> 189
<212> PRT
<213> Homo sapiens

<400> 2220
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Thr Asn Met Ala Trp Met Trp Leu Trp Phe Asp Glu Pro Gly Asn Arg
20 25 30
Trp Glu Trp Ser Ile Leu Phe Pro Ala Gly Trp Leu Thr Ser Ala Leu
35 40 45
Val Ser Gln Gly Phe Gly Gly Met Phe His Ser Val Gln Ile Ala Arg
50 55 60
His Val Ser Ser Tyr His Gly Ile Met Val Ala Phe Ala Leu Val Gly
65 70 75 80
Tyr Gly Trp Leu Ala Met His Asn Leu Arg His Pro Asp Glu Arg Tyr
85 90 95
Ser Ile Arg Ser Ala Leu Ile Ile Gly Ile Gly Ile Gln Phe Thr Trp
100 105 110
Glu Ala Val Leu Met Ile Ser Gly Ile Arg Pro Leu Thr Trp Arg Pro
115 120 125
Leu Val Ile Asp Ser Leu Ile Glu Thr Asn Leu Gly Ala Pro Phe Met
130 135 140
Leu Leu Ile Val Lys Ala Trp Arg Ala Pro Pro Glu Gly Ile Pro Gly
145 150 155 160
Ser Thr Ser Pro Arg Pro Thr Ala Arg Gly Thr Ala Arg Val Tyr Met
165 170 175
Arg Asp Asp Leu Val Ser Arg Arg Leu Leu Gln Arg Pro
180 185

<210> 2221
<211> 530
<212> DNA
<213> Homo sapiens

<400> 2221
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120
ctacaacaac gcctcagtaa aaccaaacc atcaagcaag gcatgatgca agaactactc
180
acagggaaaa cgaggttggt atgagccaca aggtgaattt agtgcattgag ctggataagc
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gtattatctc ggtaaatacg ttattgtcac agcctgagct tgctattccg gcttatcagc
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420

acaacgagaa taccacaag ctggatattg tagacggtca gcaacgtacc ttaaccttgt
 480
 tgctgctagt caaagccatt ttagaagaac ggttgtctgc gttaacgcgt
 530

<210> 2222
 <211> 67
 <212> PRT
 <213> Homo sapiens

<400> 2222
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 Ile Leu Pro Pro Lys Glu Glu Gln Thr Ala Ile Ala Asn Val Leu Ser
 20 25 30
 Asp Met Asp Thr Glu Leu Asp Ala Leu Gln Gln Arg Leu Ser Lys Thr
 35 40 45
 Lys Thr Ile Lys Gln Gly Met Met Gln Glu Leu Leu Thr Gly Lys Thr
 50 55 60
 Arg Leu Val
 65

<210> 2223
 <211> 482
 <212> DNA
 <213> Homo sapiens

<400> 2223
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 tgcatttacc caacggccgg gacagggccg gcagttcaca gtccagtttg taaagcgtg
 180
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 240
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 300
 gataggcttg actcatttca cttgaggaac ggggtcaaaa ctgtgggcgc gggcaagccc
 360
 gctccacac aagcccgctc ccacattgga tctccaatgt gggctacagc cttactgcat
 420
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 480
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 482

<210> 2224
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 2224
 Met Ser Gln Ala Tyr Arg Cys Gly Ala Ser Pro Leu Met Lys His Asn

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Val Ile Leu Val Val Leu Asp Gly Leu Asn Tyr Glu Val Ala Arg His			
	20	25	30
Ala Met Gly His Leu Gln Ala Tyr Ile Ser Ala Gly Arg Ala Ala Leu			
	35	40	45
Tyr Lys Leu Asp Cys Glu Leu Pro Ala Leu Ser Arg Pro Leu Asp Lys			
	50	55	60
Cys Ile Phe Thr Gly Val Pro Pro Ile Asp Ser Gly Ile Val His Asn			
65	70	75	80
Asn Val Ser Arg Leu Ser Asn Gln Arg Ser Ile Phe His Tyr Ala Thr			
	85	90	95
Asp Ala Gly Leu Thr Thr Ala Ala Ala			
	100	105	

<210> 2225

<211> 753

<212> DNA

<213> Homo sapiens

<400> 2225

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 120
 cgattcactg aggtgtccgc cgtgtccgag acgttcatcc gtcagcgtcc caagccactc
 180
 aaggagggca tcggccacac aggttgggtc gtctcggacg agctcgggcc ggtgggcaac
 240
 gaggattatt gcgctgtcat cggcgtatg gaaaacggag tgatgtgcac cctggagtcc
 300
 agtcgggtca gtgttgggcc gcgcgcggag tacatcgtcg agatctatgg aaccgacgga
 360
 tcaatccggt ggaacttcga ggatctcaac catttgcagg tctgtctggg gcgaacaat
 420
 cgtgccctgc agggatatgt caactgcatg gccggaccag acttcccgga gttcatgcgt
 480
 ttccaaccgg gagccggaac atccatgggc ttgacgaca tgaaggcgt tgaggctcgc
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 aaattcgtcc gaggggtctt ggatgggcag caatatggcc catctgtcgc cgatggttgg
 600
 gcctcagcgg aggtcaacga tgcgatcgtt gcctcctcgc ggggaccatg cctggcatga
 660
 cgtgaagccg gtttcgggga gaaccacgtt cgataagtga ccgcgtcatc gcgtgtctgt
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 753

<210> 2226

<211> 219

<212> PRT

<213> Homo sapiens

<400> 2226

Xaa Ala Ser Asp Pro His Gly Pro Leu Thr Trp Arg Tyr Asp Arg Glu

```

      1           5           10           15
Arg Ala Gly Ala Gly Val Ile Leu Asp Leu Met Gly His Gly Glu Asp
      20           25           30
Leu Val Gln Tyr Leu Leu Lys Gly Arg Phe Thr Glu Val Ser Ala Val
      35           40           45
Ser Glu Thr Phe Ile Arg Gln Arg Pro Lys Pro Leu Lys Glu Gly Ile
      50           55           60
Gly His Thr Gly Trp Val Val Ser Asp Glu Leu Gly Pro Val Gly Asn
      65           70           75           80
Glu Asp Tyr Cys Ala Val Ile Ala Arg Met Glu Asn Gly Val Met Cys
      85           90           95
Thr Leu Glu Ser Ser Arg Val Ser Val Gly Pro Arg Ala Glu Tyr Ile
      100          105          110
Val Glu Ile Tyr Gly Thr Asp Gly Ser Ile Arg Trp Asn Phe Glu Asp
      115          120          125
Leu Asn His Leu Gln Val Cys Leu Gly Arg Asn Asn Arg Ala Leu Gln
      130          135          140
Gly Tyr Val Asn Cys Met Ala Gly Pro Asp Phe Pro Glu Phe Met Arg
      145          150          155          160
Phe Gln Pro Gly Ala Gly Thr Ser Met Gly Phe Asp Asp Met Lys Val
      165          170          175
Val Glu Ala Ala Lys Phe Val Arg Gly Val Leu Asp Gly Gln Gln Tyr
      180          185          190
Gly Pro Ser Val Ala Asp Gly Trp Ala Ser Ala Glu Val Asn Asp Ala
      195          200          205
Ile Val Ala Ser Cys Gly Gly Pro Cys Leu Ala
      210          215

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<210> 2227

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2227

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gactttgtac gaacgcttcg tactcaccag gcaactgtgggt gtaaattccc ggtaaagcca
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240
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324

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<210> 2228

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2228

```

Met Ala His Leu Leu Lys Thr Val Val Ala Gly Cys Ser Cys Pro Phe

```



```

      1             5             10             15
Leu Ser Asn Leu Gly Ser Ser Lys Val Leu Pro Gly Lys Arg Asp Phe
      20             25             30
Val Arg Thr Leu Arg Thr His Gln Ala Leu Trp Cys Lys Ser Pro Val
      35             40             45
Lys Pro Gly Ile Pro Tyr Lys Gln Leu Thr Val Gly Val Pro Lys Glu
      50             55             60
Ile Phe Gln Asn Glu Lys Arg Val Ala Leu Ser Pro Ala Gly Val Gln
      65             70             75             80
Ala Leu Val Lys Gln Gly Phe Asn Val Val Val Glu Ser Gly Ala Gly
      85             90             95
Glu Ala

```

<210> 2229
 <211> 320
 <212> DNA
 <213> Homo sapiens

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<400> 2229
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120
tagctcagcc ccttctcgcg tgcttgccc tgggaggatg ccatccccag tccctcttc
180
tgggccctgc tctggggact cggcacagat ggatccagt catcctcagc cccctgagaa
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320

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<210> 2230
 <211> 94
 <212> PRT
 <213> Homo sapiens

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<400> 2230
Met Gly Gly Pro Asp Gly Glu Ala His Arg Glu Gly Thr Gly Gly Gly
1             5             10             15
Arg Gly Gly Glu Lys Thr Asp Ser Gly Arg Thr Leu Ala Gln Pro Leu
      20             25             30
Pro Ala Cys Leu Ala Leu Gly Gly Cys His Pro Gln Ser Pro Leu Leu
      35             40             45
Gly Pro Ala Leu Gly Thr Arg His Arg Trp Ile Gln Cys Ile Leu Ser
      50             55             60
Pro Leu Arg Ser Cys Ala Ala Ile Ser Ser Phe Ser Gly Tyr Arg Ala
      65             70             75             80
Arg Glu Ala Ala Ala Gln Gln Ala Ser Val Pro Pro Ser Cys
      85             90

```

<210> 2231
 <211> 671

<212> DNA

<213> Homo sapiens

<400> 2231

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120
aaagcccagt tcaatgcccc actgggaaat gcttcccatt aattgtggaa ttgtcgtgcc
180
catttactgt cggggtgaca gggggggtgg gggtcagagt agagacagga gaaggaagtg
240
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300
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360
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420
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480
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540
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cagctcttaa g
671

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<210> 2232

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2232

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Met Glu Lys Ser Pro Val Gln Cys Pro Thr Gly Lys Cys Phe Pro Leu
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Ile Val Glu Leu Ser Cys Pro Phe Thr Val Gly Val Thr Gly Gly Val
20           25           30
Gly Val Arg Val Glu Thr Gly Glu Gly Ser Glu His Leu Trp Asp Thr
35           40           45
His His Val Pro Gly Thr Glu Pro Tyr Leu Asp Leu Leu Gln Pro Ser
50           55           60
Gln Trp His Cys Glu Ala Ser Val Val Leu Gln Met Arg Lys Leu Arg
65           70           75           80
Phe Val Ala Ile Thr Asp Lys Gln Met Thr Leu Asn Gly Ala Gly His
85           90           95
Val Ile Cys His Arg Tyr Met His Arg Thr Met Gln Thr Ser Gln Ser
100          105          110
Pro Leu Ser Gln Thr Arg Leu Thr Ile Arg Asp Met Gln Thr Leu Ala
115          120          125
Gly Leu Gly Leu Phe Pro Ile Gly Asp Ser Leu Val Pro Pro Trp Pro
130          135          140
Leu Met Pro Thr Ala Val Trp Lys Ala Gly Ser Leu Leu Arg Arg Gln

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145 150 155 160
 Gly Asp Ile Phe Ser His Gln Leu Ser Phe Phe Tyr Ser Phe Leu Asp
 165 170 175
 Thr

<210> 2233
 <211> 6199
 <212> DNA
 <213> Homo sapiens

<400> 2233
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 120
 agtgcacaaa gtgaagctga aaaggaaagg attatgggaa agatggaagc tgaccagag
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 240
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 480
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gacagcaggt gtcatgggtc aagcataaat catatatagc attttcaggc atgttcctgg
5760
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6000
ctggcctcag tggtaaccac acatcagcac taccacaaga accaactcag agcctcgaa
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gctagatcac aggttagggg tttctctaga tgggggttct gaaatttgca gtgtctgctc
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<210> 2234

<211> 1701

<212> PRT

<213> Homo sapiens

<400> 2234

Arg	Arg	Gln	Arg	Lys	Gly	Tyr	Glu	Glu	Val	His	Val	Pro	Ala	Leu	Lys
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Pro	Lys	Pro	Phe	Gly	Ser	Glu	Glu	Gln	Leu	Leu	Pro	Val	Glu	Lys	Leu
			20					25					30		
Pro	Lys	Tyr	Ala	Gln	Ala	Gly	Phe	Glu	Gly	Phe	Lys	Thr	Leu	Asn	Arg
			35				40					45			
Ile	Gln	Ser	Lys	Leu	Tyr	Arg	Ala	Ala	Leu	Glu	Thr	Asp	Glu	Asn	Leu
			50				55					60			
Leu	Leu	Cys	Ala	Pro	Thr	Gly	Ala	Gly	Lys	Thr	Asn	Val	Ala	Leu	Met
65					70					75				80	
Cys	Met	Leu	Arg	Glu	Ile	Gly	Lys	His	Ile	Asn	Met	Asp	Gly	Thr	Ile
				85					90					95	
Asn	Val	Asp	Asp	Phe	Lys	Ile	Ile	Tyr	Ile	Ala	Pro	Met	Arg	Ser	Leu
			100					105					110		
Val	Gln	Glu	Met	Val	Gly	Ser	Phe	Gly	Lys	Arg	Leu	Ala	Thr	Tyr	Gly
			115					120					125		
Ile	Thr	Val	Ala	Glu	Leu	Thr	Gly	Asp	His	Gln	Leu	Cys	Lys	Glu	Glu
			130				135					140			
Ile	Ser	Ala	Thr	Gln	Ile	Ile	Val	Cys	Thr	Pro	Glu	Lys	Trp	Asp	Ile
145					150					155				160	
Ile	Thr	Arg	Lys	Gly	Glu	Arg	Thr	Tyr	Thr	Gln	Leu	Val	Arg	Leu	
				165				170					175		
Ile	Val	Leu	Asp	Glu	Ile	His	Leu	Leu	His	Asp	Asp	Arg	Gly	Pro	Val
			180					185					190		
Leu	Glu	Ala	Leu	Val	Ala	Arg	Ala	Ile	Arg	Asn	Ile	Glu	Met	Thr	Gln
			195				200					205			
Glu	Asp	Val	Arg	Leu	Ile	Gly	Leu	Ser	Ala	Thr	Leu	Pro	Asn	Tyr	Glu
			210			215					220				
Asp	Val	Ala	Thr	Phe	Leu	Arg	Val	Asp	Pro	Ala	Lys	Gly	Leu	Phe	Tyr
225					230					235				240	
Phe	Asp	Asn	Ser	Phe	Arg	Pro	Val	Pro	Leu	Glu	Gln	Thr	Tyr	Val	Gly
				245					250					255	
Ile	Thr	Glu	Lys	Lys	Ala	Ile	Lys	Arg	Phe	Gln	Ile	Met	Asn	Glu	Ile
			260					265					270		
Val	Tyr	Glu	Lys	Ile	Met	Glu	His	Ala	Gly	Lys	Asn	Gln	Val	Leu	Val
			275					280				285			
Phe	Val	His	Ser	Arg	Lys	Glu	Thr	Gly	Lys	Thr	Ala	Arg	Ala	Ile	Arg
			290			295					300				
Asp	Met	Cys	Leu	Glu	Lys	Asp	Thr	Leu	Gly	Leu	Phe	Leu	Arg	Glu	Gly
305					310					315				320	
Ser	Ala	Ser	Thr	Glu	Val	Leu	Arg	Thr	Glu	Ala	Glu	Gln	Cys	Lys	Asn
				325					330					335	
Leu	Glu	Leu	Lys	Asp	Leu	Leu	Pro	Tyr	Gly	Phe	Ala	Ile	His	His	Ala

1644


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      770              775              780
Ala Phe Trp Ile Leu Val Glu Asp Val Asp Ser Glu Val Ile Leu His
785              790              795              800
His Glu Tyr Phe Leu Leu Lys Ala Lys Tyr Ala Gln Asp Glu His Leu
      805              810              815
Ile Thr Phe Phe Val Pro Val Phe Glu Pro Leu Pro Pro Gln Tyr Phe
      820              825              830
Ile Arg Val Val Ser Asp Arg Trp Leu Ser Cys Glu Thr Gln Leu Pro
      835              840              845
Val Ser Phe Arg His Leu Ile Leu Pro Glu Lys Tyr Pro Pro Pro Thr
      850              855              860
Glu Leu Leu Asp Leu Gln Pro Leu Pro Val Ser Ala Leu Arg Asn Ser
865              870              875              880
Ala Phe Glu Ser Leu Tyr Gln Asp Lys Phe Pro Phe Phe Asn Pro Ile
      885              890              895
Gln Thr Gln Val Phe Asn Thr Val Tyr Asn Ser Asp Asp Asn Val Phe
      900              905              910
Val Gly Ala Pro Thr Gly Ser Gly Lys Thr Ile Cys Ala Glu Phe Ala
      915              920              925
Ile Leu Arg Met Leu Leu Gln Ser Ser Glu Gly Arg Cys Val Tyr Ile
      930              935              940
Thr Pro Met Glu Ala Leu Ala Glu Gln Val Tyr Met Asp Trp Tyr Glu
945              950              955              960
Lys Phe Gln Asp Arg Leu Asn Lys Lys Val Val Leu Leu Thr Gly Glu
      965              970              975
Thr Ser Thr Asp Leu Lys Leu Leu Gly Lys Gly Asn Ile Ile Ile Ser
      980              985              990
Thr Pro Glu Lys Trp Asp Ile Leu Ser Arg Arg Trp Lys Gln Arg Lys
      995              1000              1005
Asn Val Gln Asn Ile Asn Leu Phe Val Val Asp Glu Val His Leu Ile
      1010              1015              1020
Gly Gly Glu Asn Gly Pro Val Leu Glu Val Ile Cys Ser Arg Met Arg
1025              1030              1035              1040
Tyr Ile Ser Ser Gln Ile Glu Arg Pro Ile Arg Ile Val Ala Leu Ser
      1045              1050              1055
Ser Ser Leu Ser Asn Ala Lys Asp Val Ala His Trp Leu Gly Cys Ser
      1060              1065              1070
Ala Thr Ser Thr Phe Asn Phe His Pro Asn Val Arg Pro Val Pro Leu
      1075              1080              1085
Glu Leu His Ile Gln Gly Phe Asn Ile Ser His Thr Gln Thr Arg Leu
      1090              1095              1100
Leu Ser Met Ala Lys Pro Val Tyr His Ala Ile Thr Lys His Ser Pro
1105              1110              1115              1120
Lys Lys Pro Val Ile Val Phe Val Pro Ser Arg Lys Gln Thr Arg Leu
      1125              1130              1135
Thr Ala Ile Asp Ile Leu Thr Thr Cys Ala Ala Asp Ile Gln Arg Gln
      1140              1145              1150
Arg Phe Leu His Cys Thr Glu Lys Asp Leu Ile Pro Tyr Leu Glu Lys
      1155              1160              1165
Leu Ser Asp Ser Thr Leu Lys Glu Thr Leu Leu Asn Gly Val Gly Tyr
      1170              1175              1180
Leu His Glu Gly Leu Ser Pro Met Glu Arg Arg Leu Val Glu Gln Leu
1185              1190              1195              1200
Phe Ser Ser Gly Ala Ile Gln Val Val Val Ala Ser Arg Ser Leu Cys

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	1205		1210		1215
Trp Gly Met Asn Val Ala Ala His Leu Val Ile Ile Met Asp Thr Gln					
	1220		1225		1230
Tyr Tyr Asn Gly Lys Ile His Ala Tyr Val Asp Tyr Pro Ile Tyr Asp					
	1235		1240		1245
Val Leu Gln Met Val Gly His Ala Asn Arg Pro Leu Gln Asp Asp Glu					
	1250		1255		1260
Gly Arg Cys Val Ile Met Cys Gln Gly Ser Lys Lys Asp Phe Phe Lys					
1265		1270		1275	1280
Lys Phe Leu Tyr Glu Pro Leu Pro Val Glu Ser His Leu Asp His Cys					
	1285		1290		1295
Met His Asp His Phe Asn Ala Glu Ile Val Thr Lys Thr Ile Glu Asn					
	1300		1305		1310
Lys Gln Asp Ala Val Asp Tyr Leu Thr Trp Thr Phe Leu Tyr Arg Arg					
	1315		1320		1325
Met Thr Gln Asn Pro Asn Tyr Tyr Asn Leu Gln Gly Ile Ser His Arg					
	1330		1335		1340
His Leu Ser Asp His Leu Ser Glu Leu Val Glu Gln Thr Leu Ser Asp					
1345		1350		1355	1360
Leu Glu Gln Ser Lys Cys Ile Ser Ile Glu Asp Glu Met Asp Val Ala					
	1365		1370		1375
Pro Leu Asn Leu Gly Met Ile Ala Ala Tyr Tyr Tyr Ile Asn Tyr Thr					
	1380		1385		1390
Thr Ile Glu Leu Phe Ser Met Ser Leu Asn Ala Lys Thr Lys Val Arg					
	1395		1400		1405
Gly Leu Ile Glu Ile Ile Ser Asn Ala Ala Glu Tyr Glu Asn Ile Pro					
	1410		1415		1420
Ile Arg His His Glu Asp Asn Leu Leu Arg Gln Leu Ala Gln Lys Val					
1425		1430		1435	1440
Pro His Lys Leu Asn Asn Pro Lys Phe Asn Asp Pro His Val Lys Thr					
	1445		1450		1455
Asn Leu Leu Leu Gln Ala His Leu Ser Arg Met Gln Leu Ser Ala Glu					
	1460		1465		1470
Leu Gln Ser Asp Thr Glu Glu Ile Leu Ser Lys Ala Ile Arg Leu Ile					
	1475		1480		1485
Gln Ala Cys Val Asp Val Leu Ser Ser Asn Gly Trp Leu Ser Pro Ala					
	1490		1495		1500
Leu Ala Ala Met Glu Leu Ala Gln Met Val Thr Gln Ala Met Trp Ser					
1505		1510		1515	1520
Lys Asp Ser Tyr Leu Lys Gln Leu Pro His Phe Thr Ser Glu His Ile					
	1525		1530		1535
Lys Arg Cys Thr Asp Lys Gly Val Glu Ser Val Phe Asp Ile Met Glu					
	1540		1545		1550
Met Glu Asp Glu Glu Arg Asn Ala Leu Leu Gln Leu Thr Asp Ser Gln					
	1555		1560		1565
Ile Ala Asp Val Ala Arg Phe Cys Asn Arg Tyr Pro Asn Ile Glu Leu					
	1570		1575		1580
Ser Tyr Glu Val Val Asp Lys Asp Ser Ile Arg Ser Gly Gly Pro Val					
1585		1590		1595	1600
Val Val Leu Val Gln Leu Glu Arg Glu Glu Glu Val Thr Gly Pro Val					
	1605		1610		1615
Ile Ala Pro Leu Phe Pro Gln Lys Arg Glu Glu Gly Trp Trp Val Val					
	1620		1625		1630
Ile Gly Asp Ala Lys Ser Asn Ser Leu Ile Ser Ile Lys Arg Leu Thr					

1635 1640 1645
 Leu Gln Gln Lys Ala Lys Val Lys Leu Asp Phe Val Ala Pro Ala Thr
 1650 1655 1660
 Gly Ala His Asn Tyr Thr Leu Tyr Phe Met Ser Asp Ala Tyr Met Gly
 1665 1670 1675 1680
 Cys Asp Gln Glu Tyr Lys Phe Ser Val Asp Val Lys Glu Ala Glu Thr
 1685 1690 1695
 Asp Ser Asp Ser Asp
 1700

<210> 2235
 <211> 586
 <212> DNA
 <213> Homo sapiens

<400> 2235
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 tcagtgtcttg cacattctcc actggcagaa tgactcccga cgtgggtcgg gctccccgga
 120
 agacaccct cgaagcagtg gtgcctctag catcttcgac ctgaggaacc tggcagctga
 180
 ctcatgttg ccctctctgc tagagcgggc ggccccagaa gatgtggacc ggcgcaatga
 240
 agcccttcga cggcagcacc ggcccccgcc cctgtctccc ctctaccgga cacctgacga
 300
 ggatgaagcc ggggaacgct gtagccgct agagccaccc ccgcgagcac tttggacaaa
 360
 ggatcttggc caagtgtctg tcgctcaagt tcgagattga aattgagccc atctttggga
 420
 tcttggtct gtatgatgtg cggaagaaaa agaagatctc ggaaaacttc tacttcgacc
 480
 tgaactcgga ctccatgaag gggctgttc gggctcatgg caccaccct gccatctcca
 540
 ccctggcccc ctctgccatc ttctctgtga cctaccctc acgcgt
 586

<210> 2236
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 2236
 Met Ser Pro Lys Gln Pro Leu His Gly Val Arg Val Gln Val Glu Val
 1 5 10 15
 Glu Val Phe Arg Asp Leu Leu Phe Leu Pro His Ile Ile Gln Ser Gln
 20 25 30
 Asp Pro Lys Asp Gly Leu Asn Phe Asn Leu Glu Leu Glu Arg Gln Thr
 35 40 45
 Leu Asp Gln Asp Pro Leu Ser Lys Val Leu Ala Gly Val Ala Leu Gly
 50 55 60
 Gly Tyr Ser Val Pro Arg Leu His Pro Arg Gln Val Pro Gly Arg Gly
 65 70 75 80
 Glu Ala Gly Pro Gly Ala Gly Ala Ala Val Glu Gly Leu His Cys Ala

85 90 95
 Gly Pro His Leu Leu Gly Pro Pro Ala Leu Ala Glu Arg Ala Thr Met
 100 105 110
 Ser Gln Leu Pro Gly Ser Ser Gly Arg Arg Cys
 115 120

<210> 2237
 <211> 421
 <212> DNA
 <213> Homo sapiens

<400> 2237
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 tggggcgcag gaggctggc cagcttgggg atagtccttg gaagtggctg ggagcactga
 120
 gggaggagct gaggtccaag cctcctcca gtgcatcacc ctggtcagga gtggggcagt
 180
 gtggagccag gggctcttca gccagcacct gctgcactat gggctccagc tgtgcaagac
 240
 caccctgag aaggagtctt gttgggagca ggggggggaa gcactgtggg agaggtgtcc
 300
 ttggctcggg tagcagggac cttgatgtat cttgaagcca gggggccgac tgaggcgctt
 360
 gtctgaaggc ctccatgaga gggagggggc tggagggggc tgttcccaat aatagctcta
 420
 t
 421

<210> 2238
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 2238
 Met Glu Ala Phe Arg Gln Ala Pro Gln Ser Ala Pro Trp Leu Gln Asp
 1 5 10 15
 Thr Ser Arg Ser Leu Leu Pro Glu Pro Arg Thr Pro Leu Pro Gln Cys
 20 25 30
 Phe Pro Thr Leu Leu Pro Thr Arg Leu Leu Leu Thr Gly Gly Leu Ala
 35 40 45
 Gln Leu Glu Pro Ile Val Gln Val Leu Ala Glu Glu Pro Leu Ala
 50 55 60
 Pro His Cys Pro Thr Pro Asp Gln Gly Asp Ala Leu Glu Glu Gly Leu
 65 70 75 80
 Asp Leu Ser Ser Ser Leu Ser Ala Pro Asp His Phe Gln Gly Leu Ser
 85 90 95
 Pro Ser Trp Pro Ala Leu Leu Arg Pro Lys Arg Ser Val Trp Gly Ala
 100 105 110
 Ser Ser Trp Leu Gln Trp Asp Thr Gly Val Pro Ser
 115 120

<210> 2239
 <211> 623

<212> DNA

<213> Homo sapiens

<400> 2239

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 agccattcca ggcctggggc catggtcacc ccacacaata aggctaagag tccaggtgtc
 120
 aggcagccag gcagcagctc tagctcagcc cctgggcagc ccagcacagg ggttgctcga
 180
 cccacagtta gttctggccc tgtgcctagg cgccagaatg gcagctccag ctcaggacct
 240
 gagcgatcaa tcagtgggtc caagaagcca accaatgact caaatccctc taggcggaca
 300
 gtcagtggta catgtggccc tggacaacct gcaagcagct caggtggccc tgggcgaccc
 360
 atcagtgggtt cagttagttc tgcaagaccc ttgggcagct ctcgtggccc tggccggcct
 420
 gtgagcagtc cacatgaact tcgacgacca gtgagtggct tgggcccccc gggcggtct
 480
 gtcagtggcc ctgggagatc cataagtggc ccaattccag ctggacggac tgtcagtaat
 540
 tcagtccag gaagaccagt gagcagcttg ggacctgggc aaacagttag tagctcaggt
 600
 cccactataa agcctaagtg cac
 623

<210> 2240

<211> 207

<212> PRT

<213> Homo sapiens

<400> 2240

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Leu	Ser	His	Pro	Ser	His	Ser	Arg	Pro	Gly	Pro	Met	Val	Thr	Pro	His
			20					25					30		
Asn	Lys	Ala	Lys	Ser	Pro	Gly	Val	Arg	Gln	Pro	Gly	Ser	Ser	Ser	Ser
		35					40					45			
Ser	Ala	Pro	Gly	Gln	Pro	Ser	Thr	Gly	Val	Ala	Arg	Pro	Thr	Val	Ser
	50					55					60				
Ser	Gly	Pro	Val	Pro	Arg	Arg	Gln	Asn	Gly	Ser	Ser	Ser	Ser	Gly	Pro
65					70				75					80	
Glu	Arg	Ser	Ile	Ser	Gly	Ser	Lys	Lys	Pro	Thr	Asn	Asp	Ser	Asn	Pro
			85						90					95	
Ser	Arg	Arg	Thr	Val	Ser	Gly	Thr	Cys	Gly	Pro	Gly	Gln	Pro	Ala	Ser
			100					105					110		
Ser	Ser	Gly	Gly	Pro	Gly	Arg	Pro	Ile	Ser	Gly	Ser	Val	Ser	Ser	Ala
		115				120						125			
Arg	Pro	Leu	Gly	Ser	Ser	Arg	Gly	Pro	Gly	Arg	Pro	Val	Ser	Ser	Pro
	130					135						140			
His	Glu	Leu	Arg	Arg	Pro	Val	Ser	Gly	Leu	Gly	Pro	Pro	Gly	Arg	Ser
145				150					155					160	
Val	Ser	Gly	Pro	Gly	Arg	Ser	Ile	Ser	Gly	Pro	Ile	Pro	Ala	Gly	Arg

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<400> 2242
Xaa Arg Val Lys Gly Ser Ser Asn Thr Thr Glu Cys Val Pro Val Pro
 1          5          10          15
Thr Ser Glu His Val Ala Glu Ile Val Gly Arg Gln Gly Cys Lys Ile
 20          25          30
Lys Ala Leu Arg Ala Lys Thr Asn Thr Tyr Ile Arg Thr Pro Gly Arg
 35          40          45
Gly Glu Glu Pro Val Phe Met Val Thr Gly Arg Arg Glu Asp Val Ala
 50          55          60
Thr Ala Arg Arg Glu Ile Ile Ser Ala Ala Glu His Phe Ser Met Ile
 65          70          75          80
Arg Ala Ser Arg Asn Lys Ser Gly Ala Ala Phe Gly Val Ala Pro Ala
 85          90          95
Leu Pro Gly Gln Val Thr Ile Arg Val Arg Val Pro Tyr Arg Val Val

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      100      105      110
Gly Leu Val Val Gly Pro Lys Gly Ala Thr Ile Lys Arg Ile Gln Gln
      115      120      125
Gln Thr Asn Thr Tyr Ile Ile Thr Pro Ser Arg Asp Arg Asp Pro Val
      130      135      140
Phe Glu Ile Thr Gly Ala Pro Gly Asn Val Glu Arg Ala Arg Glu Glu
145      150      155      160
Ile Glu Thr His Ile Ala Val Arg Thr Gly Lys Ile Leu Glu Tyr Asn
      165      170      175
Asn Glu Asn Asp Phe Leu Ala Gly Ser Pro Asp Ala Ala Ile Asp Ser
      180      185      190
Arg Tyr Ser Asp Ala Trp Arg Val His Gln Pro Gly Cys Lys Pro Leu
      195      200      205
Ser Thr Phe Arg Gln Asn Ser Leu Gly Cys
      210      215

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<210> 2243

<211> 384

<212> DNA

<213> Homo sapiens

<400> 2243

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gaattcagca tttaaagtgc actcggtggc atgcaatttg ctgtcatgaa aacgactgtg
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120
aaaaaaccaa atatgtacat aaaacagtgt tatcattcct taaaagagaa ggaaaataaa
180
tccctaaata atgtggactg gaacacagaa atccaaggct ggccgcacgg gtccctggctg
240
ggatggcatc cggggagctg ctgctgggga cgtgcttgcc ggcacaggtc aggggagccg
300
ggttctgcct cctccttgcc cactctcttt gcgccctccc tgtgctcgcc tgtcttgttt
360
tacctcccat cctgggcct tgga
384

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<210> 2244

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2244

```

Met Gly Gly Lys Thr Arg Gln Ala Ser Thr Gly Arg Ala Gln Arg Glu
  1      5      10      15
Trp Ala Arg Arg Arg Gln Asn Pro Ala Pro Leu Thr Cys Ala Gly Lys
      20      25      30
His Val Pro Ser Ser Ser Ser Pro Asp Ala Ile Pro Ala Arg Thr Arg
      35      40      45
Ala Ala Ser Leu Gly Phe Leu Cys Ser Ser Pro His Tyr Leu Gly Ile
      50      55      60
Tyr Phe Pro Ser Leu Leu Arg Asn Asp Asn Thr Val Leu Cys Thr Tyr
      65      70      75      80
Leu Val Phe Leu Leu Phe Ala Ser Asp Met Gln Leu Asn Lys Ser Glu

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85 90 95
 Asp Ser Tyr Gln Glu Met Asn Pro Gln Ser Phe Ser
 100 105

<210> 2245
 <211> 632
 <212> DNA
 <213> Homo sapiens

<400> 2245
 acgcgtgcga ttaccgtcaa ggctgggtgtg gtgagcgctg atctgcacga gcggacgtct
 60
 tcgagagaag aggtcggacg cgagaggctc aactatgggtc acaccttggc ccacgctatt
 120
 gaggcccaca agcatttcac gtggcgctcat ggcgaggctg acgcggtggg catggtgttt
 180
 gcggccgaac tgtcgcaccg gtacctggga ctgtccgatg aggtcgttgc gcgcaccgcg
 240
 actatcctgt ctgagatcgg attgcctgtt acctgtgacg agattaagtg ggcagatctg
 300
 cgcaagacga tgaacgtgga caagaaaacc agggtagacc cgcagaccgg gcgtcaagtg
 360
 ttgcggtttg tcggtattca caaaccgggt caggtcgcca tgatcgtcga ccctgacgag
 420
 gccgcttttag ccgagtgcta cgaccgggtg tccgcacggg aaaaacgttc ggaaatgaac
 480
 atgtggctgc gggtcagtcg gcattcaggc ctccgtgacg ccgtcgaccc caagtgatgt
 540
 gacgattcgg gaaatatctt gttgggcact cttgagcctc gcctgattcc ccataccga
 600
 ctttaagttca gtatcgacgg catgaatccg ga
 632

<210> 2246
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 2246
 Thr Arg Ala Ile Thr Val Lys Ala Gly Val Val Ser Ala Asp Leu His
 1 5 10 15
 Glu Arg Thr Ser Ser Arg Glu Glu Val Gly Arg Glu Arg Leu Asn Tyr
 20 25 30
 Gly His Thr Leu Ala His Ala Ile Glu Ala His Lys His Phe Thr Trp
 35 40 45
 Arg His Gly Glu Ala Asp Ala Val Gly Met Val Phe Ala Ala Glu Leu
 50 55 60
 Ser His Arg Tyr Leu Gly Leu Ser Asp Glu Val Val Ala Arg Thr Arg
 65 70 75 80
 Thr Ile Leu Ser Glu Ile Gly Leu Pro Val Thr Cys Asp Glu Ile Lys
 85 90 95
 Trp Ala Asp Leu Arg Lys Thr Met Asn Val Asp Lys Lys Thr Arg Val
 100 105 110
 Asp Pro Gln Thr Gly Arg Gln Val Leu Arg Phe Val Gly Ile His Lys

115 120 125
 Pro Gly Gln Val Ala Met Ile Val Asp Pro Asp Glu Ala Ala Leu Ala
 130 135 140
 Glu Cys Tyr Asp Arg Cys Ser Ala Arg
 145 150

<210> 2247
 <211> 324
 <212> DNA
 <213> Homo sapiens

<400> 2247
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 60
 gaggttgggc gtggggagtg ccgggtacag tcagagttgc caggacagtt tggagcagtg
 120
 cctcttaatc ttggccgcac agcacctggg agctttaaag agacccccac gccctgggcg
 180
 cccccaccgc tgaccacccc gatctcagct ctgcctttcc cgctctcttg ctgggttgca
 240
 taagccagcg attcccaacc ccggctgtac ctggaagcta cccaggagc ttctggagaa
 300
 tgtgccgtgt gagccatccc cctg
 324

<210> 2248
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 2248
 Met Ala His Thr Ala His Ser Pro Glu Ala Pro Gly Val Ala Ser Arg
 1 5 10 15
 Tyr Ser Arg Gly Trp Glu Ser Leu Ala Tyr Ala Thr Gln Gln Arg Gly
 20 25 30
 Gly Lys Gly Arg Ala Glu Ile Gly Trp Val Ser Gly Gly Gly Ala Gln
 35 40 45
 Gly Val Gly Val Tyr Leu Lys Leu Pro Gly Ala Val Arg Pro Arg Leu
 50 55 60
 Arg Gly Thr Ala Pro Asn Cys Pro Gly Asn Ser Asp Cys Thr Arg His
 65 70 75 80
 Ser Pro Arg Pro Thr Ser Leu Leu Pro Leu Gly Arg Leu Ala Ser Ser
 85 90 95
 Val Gly Glu Asn Pro Gly Gly Glu Arg
 100 105

<210> 2249
 <211> 394
 <212> DNA
 <213> Homo sapiens

<400> 2249
 gaaaaccgga taacagggtg tatacaagcc tctgagttct gggagcaaca accagctcaa
 60

cccgcaaggg aaagtgagaa agcaattaag ttgggaaccg cgggggttttc ccattcccac
 120
 ggtggaaacc gcggccagtg aattgaaatc cgcttcctta aggcgaaatg ggcccttaaa
 180
 aggcaaggtc aaccgcccgc cagtgtgatg gaatttgcaa gaattcggtt tagcaccctc
 240
 ccggcttttc tcccgaccgc gtgcagggtg ggctgcgctg ggctgggag gaactgggag
 300
 ctgggggctc atgtcctgta taaaggggct gcaggggcgc tgtctcccc cagaagactg
 360
 gccacatggg gacaggcctc ctgggggcag atct
 394

<210> 2250
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 2250
 Met Ser Pro Gln Leu Pro Val Pro Pro Arg Pro Ser Ala Ala His Pro
 1 5 10 15
 Ala Arg Gly Arg Glu Lys Ser Arg Glu Gly Ala Lys Pro Asn Ser Cys
 20 25 30
 Lys Phe His His Thr Gly Gly Arg Leu Thr Leu Pro Phe Lys Gly Pro
 35 40 45
 Phe Arg Leu Lys Glu Ala Asp Phe Asn Ser Leu Ala Val Ser Thr
 50 55 60
 Val Gly Met Gly Lys Pro Arg Gly Ser Gln Leu Asn Cys Phe Leu Thr
 65 70 75 80
 Phe Pro Cys Gly Leu Ser Trp Leu Leu Leu Pro Glu Leu Arg Gly Leu
 85 90 95
 Tyr Thr Pro Cys Tyr Pro Val Phe
 100

<210> 2251
 <211> 654
 <212> DNA
 <213> Homo sapiens

<400> 2251
 acgcgtactt attcgccacc atgattatga ccagtgtttc cagtccgttc agttgttgca
 60
 gtggaatagt cagggttaaat ttaatgtgac cgtttatcgc aatctgccga ccactcgca
 120
 ttcaatcatg acttcgtgat aaaagattga gtgtgaggtt ataacgccga agcggtaaaa
 180
 attttaattt ttgccgctga ggggttgacc aagcgaagcg cggtagggtt tctgcttagg
 240
 agtttaatca tgtttcagac ttttatttct cgccataatt caaacttttt ttctgataag
 300
 ctggtttca cttctgttac tccagcttct tcggcacctg ttttacagac acctaaagct
 360
 acatcgtaa cgttatattt tgatagtttg acggttaatg ctggtaatgg tggttttctt
 420

cattgcattc agatggatac atctgtcaac gccgctaatac aggttggttc tgttggtgct
 480
 gatattgctt ttgatgccga ccctaaattt tttgctgtt tggttcgctt tgagtcttct
 540
 tcggttccga ctacctccc gactgcctat gatgtttatc ctttggatgg tcgccatgat
 600
 ggtggttatt ataccgtcaa ggactgtgtg actattgacg tccttcctcg tacg
 654

<210> 2252

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2252

Met	Phe	Gln	Thr	Phe	Ile	Ser	Arg	His	Asn	Ser	Asn	Phe	Phe	Ser	Asp
1				5					10					15	
Lys	Leu	Val	Leu	Thr	Ser	Val	Thr	Pro	Ala	Ser	Ser	Ala	Pro	Val	Leu
			20					25					30		
Gln	Thr	Pro	Lys	Ala	Thr	Ser	Ser	Thr	Leu	Tyr	Phe	Asp	Ser	Leu	Thr
		35					40				45				
Val	Asn	Ala	Gly	Asn	Gly	Gly	Phe	Leu	His	Cys	Ile	Gln	Met	Asp	Thr
	50				55						60				
Ser	Val	Asn	Ala	Ala	Asn	Gln	Val	Val	Ser	Val	Gly	Ala	Asp	Ile	Ala
65				70					75					80	
Phe	Asp	Ala	Asp	Pro	Lys	Phe	Phe	Ala	Cys	Leu	Val	Arg	Phe	Glu	Ser
			85					90					95		
Ser	Ser	Val	Pro	Thr	Thr	Leu	Pro	Thr	Ala	Tyr	Asp	Val	Tyr	Pro	Leu
		100					105					110			
Asp	Gly	Arg	His	Asp	Gly	Gly	Tyr	Thr	Val	Lys	Asp	Cys	Val	Thr	
	115					120					125				
Ile	Asp	Val	Leu	Pro	Arg	Thr									
	130					135									

<210> 2253

<211> 327

<212> DNA

<213> Homo sapiens

<400> 2253

ggatcctgct gggcctcttt tacgtgatgt tgaccagacc gctggtgcgc attattcgcg
 60
 cactgagcac cagcaagcag gcccgctgg attgccacc gggtcacgaa aacgatgaaa
 120
 tcggcgtatt ggtcaacgtc gcccaaccagc aattcgacaa tatggaaacc gaaatcgagc
 180
 agcgccgcca cgccgaggac cgcctcaccg aatacctggg ccaactggaa gatatcgctt
 240
 ccgcacgcac cctggagctc aaggccagca accaacgctt gagccaatcc aacgatgagc
 300
 tggaagcggc aaagttgacc gccttg
 327

<210> 2254

<211> 100
 <212> PRT
 <213> Homo sapiens

<400> 2254
 Met Leu Thr Gln Pro Leu Val Arg Ile Ile Arg Ala Leu Ser Thr Ser
 1 5 10 15
 Lys Gln Ala Arg Leu Asp Cys Pro Pro Gly His Glu Asn Asp Glu Ile
 20 25 30
 Gly Val Leu Val Asn Val Ala Asn Gln Gln Phe Asp Asn Met Glu Thr
 35 40 45
 Glu Ile Glu Gln Arg Arg His Ala Glu Asp Arg Leu Thr Glu Tyr Leu
 50 55 60
 Gly Gln Leu Glu Asp Ile Val Ser Ala Arg Thr Leu Glu Leu Lys Ala
 65 70 75 80
 Ser Asn Gln Arg Leu Ser Gln Ser Asn Asp Glu Leu Glu Ala Ala Lys
 85 90 95
 Leu Thr Ala Leu
 100

<210> 2255
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 2255
 nngctagcac atgagaagtg tgaagtttat accttgcttg ggcgatcacg ccgttttcca
 60
 aatatggctc atgcaacttc tggccaaagg ggccacattg agcgtgctgc tatcaatgct
 120
 cctgtacagg gcagtgacgc tgatgttgct atgtgtgcaa tgcttgagat agacaggaat
 180
 actcgtctta aggagcttgg ttggacgcta ctcttgacagg tgcattgatga agtgatactg
 240
 gaagggcctt cagagtctgc ggagtnggcc aagtcacatg ttgttgagtg catgtctaag
 300
 cccttctatg gcaccaatat cctgagggtc gaccttgctg ttgatgcaa gtgtgca
 357

<210> 2256
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 2256
 Xaa Leu Ala His Glu Lys Cys Glu Val Tyr Thr Leu Leu Gly Arg Ser
 1 5 10 15
 Arg Arg Phe Pro Asn Met Ala His Ala Thr Ser Gly Gln Arg Gly His
 20 25 30
 Ile Glu Arg Ala Ala Ile Asn Ala Pro Val Gln Gly Ser Ala Ala Asp
 35 40 45
 Val Ala Met Cys Ala Met Leu Glu Ile Asp Arg Asn Thr Arg Leu Lys
 50 55 60
 Glu Leu Gly Trp Thr Leu Leu Leu Gln Val His Asp Glu Val Ile Leu

```

65          70          75          80
Glu Gly Pro Ser Glu Ser Ala Glu Xaa Ala Lys Ser Ile Val Val Glu
          85          90          95
Cys Met Ser Lys Pro Phe Tyr Gly Thr Asn Ile Leu Arg Val Asp Leu
          100          105          110
Ala Val Asp Ala Lys Cys Ala
          115

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<210> 2257
 <211> 626
 <212> DNA
 <213> Homo sapiens

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<400> 2257
nnaatgacaa aaaatatgaa ccaaaatagt gacagtggca gtacaaataa ctataaaagc
60
ctgaaaccta aattagaaaa tctgagttct ttaccaccag attctgacag aacatcagaa
120
gtatatctac atgaagaatt acagcaggac atgcaaaagt ttaagaatga ggtcaacaca
180
ttaagaagaag agttcctggc tttgaagaaa gaaaatgttc aacttcataa agagggtgaa
240
gaagaaatgg agaagcacag aagtaatagc acagaattat caggaaccct aactgatggt
300
actactgttg gcaatgatga tgatggacta aatcagcaga ttctaggaa ggaaaatgaa
360
gagcatgaca ggctgcaga taaaacagct aatgaaaaga acaagggtcaa aaaccaaata
420
tatcctgagg ctgactttgc tgactcaatg gagccatctg aaatagcctc agaggattgt
480
gaattgtctc actctgttta tgagaatttt atgttgctga ttgaacaact tagaatggag
540
tataaaggta ggaccactgc ataaatgcaa ggccttttga tgtatcctgc agtaatgtgt
600
gtatacattg ctgagaactg acgcgt
626

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<210> 2258
 <211> 187
 <212> PRT
 <213> Homo sapiens

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<400> 2258
Xaa Met Thr Lys Asn Met Asn Gln Asn Ser Asp Ser Gly Ser Thr Asn
1          5          10          15
Asn Tyr Lys Ser Leu Lys Pro Lys Leu Glu Asn Leu Ser Ser Leu Pro
          20          25          30
Pro Asp Ser Asp Arg Thr Ser Glu Val Tyr Leu His Glu Glu Leu Gln
          35          40          45
Gln Asp Met Gln Lys Phe Lys Asn Glu Val Asn Thr Leu Glu Glu Glu
          50          55          60
Phe Leu Ala Leu Lys Lys Glu Asn Val Gln Leu His Lys Glu Val Glu
65          70          75          80
Glu Glu Met Glu Lys His Arg Ser Asn Ser Thr Glu Leu Ser Gly Thr

```

				85						90					95				
Leu	Thr	Asp	Gly	Thr	Thr	Val	Gly	Asn	Asp	Asp	Asp	Gly	Leu	Asn	Gln				
			100					105					110						
Gln	Ile	Pro	Arg	Lys	Glu	Asn	Glu	Glu	His	Asp	Arg	Pro	Ala	Asp	Lys				
		115					120					125							
Thr	Ala	Asn	Glu	Lys	Asn	Lys	Val	Lys	Asn	Gln	Ile	Tyr	Pro	Glu	Ala				
	130					135					140								
Asp	Phe	Ala	Asp	Ser	Met	Glu	Pro	Ser	Glu	Ile	Ala	Ser	Glu	Asp	Cys				
145					150				155					160					
Glu	Leu	Ser	His	Ser	Val	Tyr	Glu	Asn	Phe	Met	Leu	Leu	Ile	Glu	Gln				
			165					170					175						
Leu	Arg	Met	Glu	Tyr	Lys	Gly	Arg	Thr	Thr	Ala									
			180					185											

<210> 2259

<211> 425

<212> DNA

<213> Homo sapiens

<400> 2259

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acgcgtcaca atgataaagc cattatatc atcaagaggt aaatcattct tgaaattttc
60
taaaggtaaa cacttacgtg taacacgttc atcaaagaat tcaggaacca catattctgg
120
acgggtcatct acgactgtaa cagcagagcc aataaacaat agcaaatacag taatagctcg
180
gctaacaatga cctgcaccta atacgagaac tgacggatca ttttctacag gttgtacgaa
240
acactccatt tcgcctacca tgcatagaga attcagcttt gctttatcta cagtaaattcc
300
ttcaatagga gttccgtata gaacccttcc atcttcagca taaatagtct tatccccttg
360
acgaggaccg gatagaacgg taaccattac ggtagcttca gtaacctgta gacgattttt
420
catga
425

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<210> 2260

<211> 141

<212> PRT

<213> Homo sapiens

<400> 2260

Met	Lys	Asn	Arg	Leu	Gln	Val	Thr	Glu	Ala	Thr	Val	Met	Val	Thr	Val				
1				5				10				15							
Leu	Ser	Gly	Pro	Arg	Gln	Gly	Asp	Lys	Thr	Ile	Tyr	Ala	Glu	Asp	Gly				
		20					25				30								
Arg	Val	Leu	Tyr	Gly	Thr	Pro	Ile	Glu	Gly	Phe	Thr	Val	Asp	Lys	Ala				
	35					40				45									
Lys	Leu	Asn	Ser	Leu	Cys	Met	Val	Gly	Glu	Met	Glu	Cys	Phe	Val	Gln				
	50				55					60									
Pro	Val	Glu	Asn	Asp	Pro	Ser	Val	Leu	Val	Leu	Gly	Ala	Gly	His	Val				
65				70				75				80							
Ser	Arg	Ala	Ile	Thr	Asp	Leu	Leu	Leu	Phe	Ile	Gly	Cys	Arg	Val	Thr				

				85						90					95				
Val	Val	Asp	Asp	Arg	Pro	Glu	Tyr	Val	Val	Pro	Glu	Phe	Phe	Asp	Glu				
			100						105					110					
Arg	Val	Thr	Arg	Lys	Cys	Leu	Pro	Leu	Glu	Asn	Phe	Lys	Asn	Asp	Leu				
		115				120						125							
Pro	Leu	Asp	Glu	Tyr	Asn	Gly	Phe	Ile	Ile	Val	Thr	Arg							
	130					135					140								

<210> 2261

<211> 660

<212> DNA

<213> Homo sapiens

<400> 2261

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ngctagctgc tgctcctgag gatcggccgc agaattattgc tgccgatctg tccgggttgc
60
ttgagcccaa gcgcgaggtc gatgtgtccg gcgaccgcgc gcgttgcggt gggagcatag
120
tgctcgtgca cgctgaccga gaggtccgtg cggagagtac tcccgatgat atttgcgggc
180
agctcgatgc cgtggccgcc atgatggccc ttgtctatgg gtcgaatgtg actattcccg
240
acgatgccgg gaggtctctc gacaagcttc actgaacggt gttcaattgg tcccaacggc
300
tgcccatgtg ggcagccgct ctatctcgtc atgggaagga acccgatgtc gtcacgcaat
360
ggtttccagg ccaccgacct ggctcttacc gcggtctttg cagccctcat tgctgtgcta
420
gccgtcatcc cgccgatgtt catggtgggg gcggtccctt ttgcccttca gatggttgcc
480
gtcatgctgg cgccgatggt gctgggaagt atccgtggcg gatgcgcggt aggccttgat
540
atccttgtcg gcgcgctggg gctgcccgtc ttcagcggtg ggtctagcgg gattggcgtc
600
ctggtgggtc ccaactggtg gtatctatgg ggatggctga tcggcgcttt cgtggcggtt
660

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<210> 2262

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2262

Met	Pro	Gly	Gly	Ser	Ser	Thr	Ser	Phe	Thr	Glu	Arg	Cys	Ser	Ile	Gly				
1				5					10					15					
Pro	Asn	Gly	Cys	Pro	Cys	Gly	Gln	Pro	Leu	Tyr	Leu	Val	Met	Gly	Arg				
		20				25						30							
Asn	Pro	Met	Ser	Ser	Arg	Asn	Gly	Phe	Gln	Ala	Thr	Asp	Leu	Ala	Leu				
	35					40					45								
Ile	Ala	Val	Phe	Ala	Ala	Leu	Ile	Ala	Val	Leu	Ala	Val	Ile	Pro	Pro				
	50				55				60										
Met	Phe	Met	Val	Gly	Ala	Val	Pro	Phe	Ala	Leu	Gln	Met	Val	Ala	Val				
65				70				75				80							
Met	Leu	Ala	Pro	Met	Val	Leu	Gly	Ser	Ile	Arg	Gly	Gly	Cys	Ala	Val				

			85					90					95				
Gly	Leu	Tyr	Ile	Leu	Val	Gly	Ala	Leu	Gly	Leu	Pro	Val	Phe	Ser	Gly		
			100					105					110				
Gly	Ser	Ser	Gly	Ile	Gly	Val	Leu	Val	Gly	Pro	Thr	Gly	Gly	Tyr	Leu		
		115					120					125					
Trp	Gly	Trp	Leu	Ile	Gly	Ala	Phe	Val	Ala	Gly							
	130					135											

<210> 2263

<211> 491

<212> DNA

<213> Homo sapiens

<400> 2263

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naccggttcc cggtcgaccg aggcaaaggc aaaagtaagc aggggtgccc tagtccccgt
60
tcccaccgcg gtatggctgg gtcactgctg acagatggcg tccccctgct gatctttccg
120
gagggcaccc ggtctcgac cggcgcaatg ggcaccttca aacctggggc tgccgcattg
180
gctatttcac gtgggggttcc gggtatcccg attgctttag taggagcatg ggcggtatg
240
ccgtccgagc aagccaggtt accaaaagga cgtccattgg tccacgtggc tattggacac
300
cctatggacc ctgttcccg cgagatcgcc caccaattct ccgaacggat tcgtcgccag
360
gtcattgagt tgcacgacca aaccgcccgc gcctacggca tgccaaccct tgacgaatac
420
ggacgccacc gcgcgctaag ccaggcctcc gagagcggcg acaccgcatc caccaaccac
480
tcgacgtgca c
491

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<210> 2264

<211> 163

<212> PRT

<213> Homo sapiens

<400> 2264

Xaa	Ala	Phe	Pro	Val	Asp	Arg	Gly	Lys	Gly	Lys	Ser	Lys	Gln	Gly	Ala		
1				5				10					15				
Arg	Ser	Pro	Arg	Ser	His	Arg	Gly	Met	Ala	Gly	Ser	Leu	Leu	Thr	Asp		
			20					25				30					
Gly	Val	Pro	Leu	Leu	Ile	Phe	Pro	Glu	Gly	Thr	Arg	Ser	Arg	Thr	Gly		
		35					40				45						
Ala	Met	Gly	Thr	Phe	Lys	Pro	Gly	Ala	Ala	Ala	Leu	Ala	Ile	Ser	Arg		
	50				55						60						
Gly	Val	Pro	Val	Ile	Pro	Ile	Ala	Leu	Val	Gly	Ala	Trp	Ala	Ala	Met		
65				70					75					80			
Pro	Ser	Glu	Gln	Ala	Arg	Leu	Pro	Lys	Gly	Arg	Pro	Leu	Val	His	Val		
			85				90				95						
Ala	Ile	Gly	His	Pro	Met	Asp	Pro	Val	Pro	Gly	Glu	Ile	Ala	His	Gln		
		100					105				110						
Phe	Ser	Glu	Arg	Ile	Arg	Arg	Gln	Val	Ile	Glu	Leu	His	Asp	Gln	Thr		

115 120 125
 Ala Arg Ala Tyr Gly Met Pro Thr Leu Asp Glu Tyr Gly Arg His Arg
 130 135 140
 Ala Leu Ser Gln Ala Ser Glu Ser Gly Asp Thr Ala Ser Thr Asn His
 145 150 155 160
 Ser Thr Cys

<210> 2265
 <211> 328
 <212> DNA
 <213> Homo sapiens

<400> 2265
 ccattgggaat aggcacaacac ggatggatct actgtataac ttgcctgcca tcaggaaaga
 60
 gtcaacacgg cagacacatg ctggcagaaa cctgtctgga gttgcccctg agcattgatg
 120
 cataaccacc gagaggagga gaggggtggtg ggagaaatca gatcagagtt caaaatgcac
 180
 cggaagggct cggaatgta agactgcacc ttgcaggaac tgtcaatgcc actaccaata
 240
 tcactcactt acgtcaagca cttgagagca gctgcgaaca caattctctg actcctaacc
 300
 tttagcacgt gactgggacc actggaca
 328

<210> 2266
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 2266
 Met Gly Ile Gly Gln His Gly Trp Ile Tyr Cys Ile Thr Cys Leu Pro
 1 5 10 15
 Ser Gly Lys Ser Gln His Gly Arg His Met Leu Ala Glu Thr Leu Leu
 20 25 30
 Glu Leu Pro Leu Ser Ile Asp Ala Tyr His Pro Arg Gly Gly Glu Gly
 35 40 45
 Gly Gly Arg Asn Gln Ile Arg Val Gln Asn Ala Pro Glu Gly Leu Gly
 50 55 60
 Asn Val Arg Leu His Leu Ala Gly Thr Val Asn Ala Thr Thr Asn Ile
 65 70 75 80
 Thr His Leu Arg Gln Ala Leu Glu Ser Ser Cys Glu His Asn Ser Leu
 85 90 95
 Thr Pro Asn Leu
 100

<210> 2267
 <211> 370
 <212> DNA
 <213> Homo sapiens

<400> 2267

agatctatgc aggtagcgct ggtctccggg gggtaagttg tccactccct gtcagatggc
 60
 agaccatgga gggctaatagc aggctgggaa ggctaggcag agttcccaga aacaggtcac
 120
 cgaggagacc accactgaat tgcactctcg ctggggagtt aagccatata cccctaagac
 180
 agcagtgacc ggagtggcca atctgtacag ggacaggctc aaggccacag caactcaggg
 240
 gacagagatg gtgaagcagg catgtcctaa agcctccctt cttaaccctg accttgaagg
 300
 acaggaaaca agtcatttac gtatgttgta ggcctagagc aagggattgc agagatgggc
 360
 gtcaacgcgt
 370

<210> 2268

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2268

Met	Ala	Asp	His	Gly	Gly	Leu	Met	Gln	Ala	Gly	Lys	Ala	Arg	Gln	Ser
1				5				10						15	
Ser	Gln	Lys	Gln	Val	Thr	Glu	Gly	Ala	Thr	Thr	Glu	Leu	His	Ser	Arg
			20					25					30		
Trp	Gly	Val	Lys	Pro	Tyr	Pro	Pro	Lys	Thr	Ala	Val	Thr	Gly	Val	Ala
		35						40				45			
Asn	Leu	Tyr	Arg	Asp	Arg	Leu	Lys	Ala	Thr	Ala	Thr	Gln	Gly	Thr	Glu
	50					55					60				
Met	Val	Lys	Gln	Ala	Cys	Pro	Lys	Ala	Ser	Leu	Leu	Asn	Pro	Asp	Leu
65					70					75				80	
Glu	Gly	Gln	Glu	Thr	Ser	His	Leu	Arg	Met	Leu					
			85						90						

<210> 2269

<211> 507

<212> DNA

<213> Homo sapiens

<400> 2269

ctctccgacc gcgtcaaccc cggcaatatc cgcaagttcg acgaccagat cgaatcgatt
 60
 tgtaaggctg ccaccgagca cggtagcagc atccgaatcg gcgtgaatgc tgggtctctc
 120
 gacaaacgtc tgcttgacaa atacggagcc ccgaccgccg aggctatggt ggagtcggca
 180
 ctgtgggagg ccagcctctt tgagcaatac ggattccggg atttcaaaat ctcggtgaag
 240
 caccacgacc cggtcgtcat gatccgtgcc tatgaacagc tcgccgcaa atgcgattat
 300
 ccccttcatt tgggcgttac tgaggctggt ccggccttcc aaggcaccat caagtcggcg
 360
 gtggccttcg ggcattctct tgccgagggt atcggcgata ccatacgctg ctccttgctg
 420

gctgatccgg tcgaggaagt caaggtgggt atcaagatcc tggagtcgct caacctacgt
 480
 cctcgaggtc tagagatcgt ctcctgc
 507

<210> 2270

<211> 169

<212> PRT

<213> Homo sapiens

<400> 2270

Leu	Ser	Asp	Arg	Val	Asn	Pro	Gly	Asn	Ile	Arg	Lys	Phe	Asp	Asp	Gln
1				5					10					15	
Ile	Glu	Ser	Ile	Cys	Lys	Ala	Ala	Thr	Glu	His	Gly	Thr	Ser	Ile	Arg
			20					25					30		
Ile	Gly	Val	Asn	Ala	Gly	Ser	Leu	Asp	Lys	Arg	Leu	Leu	Asp	Lys	Tyr
	35						40					45			
Gly	Ala	Pro	Thr	Ala	Glu	Ala	Met	Val	Glu	Ser	Ala	Leu	Trp	Glu	Ala
	50					55					60				
Ser	Leu	Phe	Glu	Gln	Tyr	Gly	Phe	Arg	Asp	Phe	Lys	Ile	Ser	Val	Lys
65					70					75				80	
His	His	Asp	Pro	Val	Val	Met	Ile	Arg	Ala	Tyr	Glu	Gln	Leu	Ala	Ala
				85						90				95	
Lys	Cys	Asp	Tyr	Pro	Leu	His	Leu	Gly	Val	Thr	Glu	Ala	Gly	Pro	Ala
			100					105					110		
Phe	Gln	Gly	Thr	Ile	Lys	Ser	Ala	Val	Ala	Phe	Gly	His	Leu	Leu	Ala
	115						120					125			
Glu	Gly	Ile	Gly	Asp	Thr	Ile	Arg	Val	Ser	Leu	Ser	Ala	Asp	Pro	Val
	130						135					140			
Glu	Glu	Val	Lys	Val	Gly	Ile	Lys	Ile	Leu	Glu	Ser	Leu	Asn	Leu	Arg
145					150					155				160	
Pro	Arg	Gly	Leu	Glu	Ile	Val	Ser	Cys							
				165											

<210> 2271

<211> 573

<212> DNA

<213> Homo sapiens

<400> 2271

nncgccgacc cggacttcca ggagatgtta cgtgcgctgg tggacttcga cgaagacatc
 60
 ccgatggctcg acgaaagcct ggaacagttc gccagttgc tcaaaaccg cacctcggaa
 120
 gaaggcatgg cgccgttgac ctcggaacgc gtggcgcggt tggccactta cagcgcacgg
 180
 ctggcgggacc accaagggcg tgtgtccgcg cgcattggcg acttggtcca actggtcagc
 240
 gaggcggact ttatccgcca cctggcgggc gacgagatga ctgatgccgg ccatatcgaa
 300
 cgggcgctca aggccaaaggc cagcgtacc gggcgtgtat cggcgcggaat tctcgacgac
 360
 atgctcgctg gggtcacct gatcgacacc gccggtgcgg ccgtgggcaa atgcaacggg
 420

ctgacgggtgc tggaagtcgg cgattcggcg ttcggcgtgc cggcgcggat ttccgccacg
 480
 gtgtaccgcg gcggcagcgg cattgtcgac atcgagcgcg aagttaacct cggccagccg
 540
 atccactcca agggcgtgat gatccttacc ggt
 573

<210> 2272

<211> 191

<212> PRT

<213> Homo sapiens

<400> 2272

Xaa	Ala	Asp	Pro	Asp	Phe	Gln	Glu	Met	Leu	Arg	Ala	Leu	Val	Asp	Phe
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			20				25						30		
Leu	Leu	Lys	Thr	Arg	Thr	Ser	Glu	Glu	Gly	Met	Ala	Pro	Leu	Thr	Ser
		35					40					45			
Asp	Ala	Val	Ala	Arg	Leu	Ala	Thr	Tyr	Ser	Ala	Arg	Leu	Ala	Asp	His
		50				55					60				
Gln	Gly	Arg	Val	Ser	Ala	Arg	Ile	Gly	Asp	Leu	Phe	Gln	Leu	Val	Ser
65					70				75					80	
Glu	Ala	Asp	Phe	Ile	Arg	His	Leu	Ala	Gly	Asp	Glu	Met	Thr	Asp	Ala
			85						90					95	
Gly	His	Ile	Glu	Arg	Ala	Leu	Lys	Ala	Lys	Ala	Thr	Arg	Thr	Gly	Arg
			100					105					110		
Val	Ser	Ala	Arg	Ile	Leu	Asp	Asp	Met	Leu	Ala	Gly	Val	Ile	Leu	Ile
		115					120					125			
Asp	Thr	Ala	Gly	Ala	Ala	Val	Gly	Lys	Cys	Asn	Gly	Leu	Thr	Val	Leu
		130				135					140				
Glu	Val	Gly	Asp	Ser	Ala	Phe	Gly	Val	Pro	Ala	Arg	Ile	Ser	Ala	Thr
145					150					155				160	
Val	Tyr	Pro	Gly	Gly	Ser	Gly	Ile	Val	Asp	Ile	Glu	Arg	Glu	Val	Asn
			165						170					175	
Leu	Gly	Gln	Pro	Ile	His	Ser	Lys	Gly	Val	Met	Ile	Leu	Thr	Gly	
			180					185					190		

<210> 2273

<211> 4355

<212> DNA

<213> Homo sapiens

<400> 2273

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 120
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 180
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 300

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360
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420
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<210> 2274

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2274

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Gln	Arg	Ser	Cys	Arg	Gly	Gly	Leu	Ser	Leu	Glu	Arg	Leu	Pro	Asn	Ser
			20				25						30		
Ile	Ala	Ser	Arg	Phe	Arg	Leu	Thr	Glu	Arg	Glu	Glu	Glu	Val	Ile	Thr
			35				40						45		
Cys	Phe	Glu	Arg	Ala	Ser	Trp	Ile	Ala	Gln	Val	Phe	Leu	Gln	Glu	Leu
			50				55					60			
Glu	Lys	Thr	Thr	Asn	Asn	Ser	Thr	Ser	Arg	His	Leu	Lys	Gly	Cys	His
					70					75				80	
Pro	Leu	Asp	Tyr	Glu	Leu	Thr	Tyr	Phe	Leu	Glu	Ala	Ala	Leu	Gln	Ser
					85					90				95	
Ala	Tyr	Val	Lys	Asn	Leu	Lys	Lys	Gly	Asn	Ile	Val	Lys	Gly	Met	Arg
					100				105				110		
Glu	Leu	Arg	Glu	Val	Leu	Arg	Thr	Val	Glu	Thr	Lys	Ala	Thr	Gln	Asn
					115				120				125		
Phe	Lys	Val	Met	Ala	Ala	Lys	His	Leu	Ala	Gly	Val	Leu	Leu	His	Ser
					130			135				140			
Leu	Ser	Gly	Val	Leu	Leu	Glu	Pro	Pro	Val	Pro	Pro	Ser	Ala		

145

150

155

<210> 2275

<211> 608

<212> DNA

<213> Homo sapiens

<400> 2275

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120

aaggagaaca ggagacctca aaaggaagaa ccaggctgtg ccccaacctt ttttccaaac

180

caaagttctg gcttcactac acccactgct atgacacctc ctgttctaac cacagccgaa

240

acttcagtca agcccagtgt ctctgcattc actcattccc caccagaaaa cacaactggg

300

atttcaagca caatcagttt tcattcaaga actcttaatc tgacagatgt gattgaagaa

360

ctagcccaag caagtactca gactttgaag agcacaattg cttctgaaac aactttgtcc

420

agcaaatac accagagtac cacaactagg aaagcaatca ttagacactc aaccatacca

480

ccattcttga gcagcagtgct tactctaata ccagttccca tctcccctcc ctttactcag

540

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600

aagctgcg

608

<210> 2276

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2276

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5

10

15

Gly Cys Ala Pro Thr Phe Phe Pro Asn Gln Ser Ser Gly Phe Thr Thr

20

25

30

Pro Thr Ala Met Thr Pro Pro Val Leu Thr Thr Ala Glu Thr Ser Val

35

40

45

Lys Pro Ser Val Ser Ala Phe Thr His Ser Pro Pro Glu Asn Thr Thr

50

55

60

Gly Ile Ser Ser Thr Ile Ser Phe His Ser Arg Thr Leu Asn Leu Thr

65

70

75

80

Asp Val Ile Glu Glu Leu Ala Gln Ala Ser Thr Gln Thr Leu Lys Ser

85

90

95

Thr Ile Ala Ser Glu Thr Thr Leu Ser Ser Lys Ser His Gln Ser Thr

100

105

110

Thr Thr Arg Lys Ala Ile Ile Arg His Ser Thr Ile Pro Pro Phe Leu

115

120

125

Ser Ser Ser Ala Thr Leu Ile Pro Val Pro Ile Ser Pro Pro Phe Thr

130	135	140
Gln Arg Ala Val Thr Asp Asn Val Ala Thr Pro Ile Ser Gly Leu Met		
145	150	155
Thr Asn Thr Val Val Lys Leu		160
165		

<210> 2277
 <211> 640
 <212> DNA
 <213> Homo sapiens

<400> 2277
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 gacagggaca ctgagggatg aaagcccccga cgctctggcc tgccctgctc agtcagggcc
 180
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 300
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 360
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 420
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 480
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 540
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 640

<210> 2278
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 2278
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 Gly Arg Ser Ser Pro Gly Thr Ala Gln Pro Gly Pro Xaa Thr Lys Ser
 20 25 30
 Cys Cys Pro Pro Trp Leu Ser Ser Pro Pro Ala Ala Cys Leu Pro Ser
 35 40 45
 Ser Leu Leu Ser Pro Tyr Pro Val Leu Pro Ser Pro Ser Cys Lys Val
 50 55 60
 His Ala Thr Pro Gln Glu Pro Gln Arg Leu Ser Ser Asp Pro Thr
 65 70 75 80
 Leu Ser Ala Pro Thr Leu Pro Pro His Gln Ile Leu Ser Thr Pro
 85 90 95

<210> 2279
 <211> 331
 <212> DNA
 <213> Homo sapiens

<400> 2279
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 120
 ttccggacca gggggatgca caggggcaa gagaatgcat ggaatcagag ggcactggcc
 180
 ccactcactc cccatcatcg cctgcagtgt tgttttcatt cctgcactgt gcctttgttt
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 331

<210> 2280
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 2280
 Met Ile Val Arg Leu Trp Ala Thr Val His Lys Asp Gly Pro Cys Leu
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 Arg Val Arg Arg Thr Leu Pro Asp Gln Gly Asp Ala Gln Gly Pro Arg
 20 25 30
 Glu Cys Met Glu Ser Glu Gly Thr Gly Pro Thr His Ser Pro Ser Ser
 35 40 45
 Pro Ala Val Leu Phe Ser Phe Leu His Cys Ala Phe Val Ser Phe Leu
 50 55 60
 Gly Thr Ser Phe Thr Pro Ala Cys Ile Ser Ser Leu Ser His Gly Ser
 65 70 75 80
 Pro Leu Ser Trp Ser Ser Gly Ala Val Pro Ile
 85 90

<210> 2281
 <211> 409
 <212> DNA
 <213> Homo sapiens

<400> 2281
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 120
 gatgacaaat tcaagcattg ccacagaaaa ttttctgtct gtcagttctc ccacccaact
 180
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 240
 ctttgtgcca gatattttac atggcaactt tcaagagggt gggcagctgg cctctgccgc
 300

gcctgacttg tggatagatg ctaagaagcc cttcagtttg aaagcagatg gtgagaatcc
 360
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 409

<210> 2282
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 2282
 Met Thr Asn Ser Ser Ile Ala Thr Glu Asn Phe Pro Ala Val Ser Ser
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 Pro Thr Gln Leu Ile Met Lys Pro Gly Ser Glu Trp Asp Gly Ser Thr
 20 25 30
 Pro Ser Glu Asp Ser Arg Gly Thr Phe Val Pro Asp Ile Leu His Gly
 35 40 45
 Asn Phe Gln Glu Gly Gly Gln Leu Ala Ser Ala Ala Pro Asp Leu Trp
 50 55 60
 Ile Asp Ala Lys Lys Pro Phe Ser Leu Lys Ala Asp Gly Glu Asn Pro
 65 70 75 80
 Asp Ile Leu Thr His Cys Glu His Asp Tyr Gly Glu Thr Thr Thr Arg
 85 90 95

<210> 2283
 <211> 404
 <212> DNA
 <213> Homo sapiens

<400> 2283
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 120
 ccgacaattt ctagtaaatt ccgacgaaag tttattgtaa aatactctgc aacctctttt
 180
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 240
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 360
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 404

<210> 2284
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 2284
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 His Leu Leu Val Val Phe Phe Leu Val Gly Ala Val Pro Thr Ile Ser

20 25 30
 Ser Lys Phe Arg Arg Lys Phe Ile Val Lys Tyr Ser Ala Thr Ser Phe
 35 40 45
 Leu Leu Cys His Leu Gly Gly Gly Cys Asn Phe Pro His His Cys Arg
 50 55 60
 Val Leu Arg Asn Arg Leu Gln Pro Cys His Arg Ser Ser Gln Leu His
 65 70 75 80
 Gln Ala Phe Gly Arg Ala Val Ile Arg Leu Pro Ala Lys Ala Gln Ala
 85 90 95
 Ser His Ala Thr Ser Ser Pro Lys Met Arg Lys Val Arg Thr Arg Lys
 100 105 110
 Gln Gly Ala Val Glu Arg Ser Ser Ala Pro
 115 120

<210> 2285

<211> 6505

<212> DNA

<213> Homo sapiens

<400> 2285

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 240
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 780
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 gaagatgagg aggaggacct aaagatcacg caccatgcag acaacaccct gaagagcttc
 960
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 1020

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1080
ggactgtccc atgtggcggg catgtgccag ccgcaccgca gctgcagcat caacgaggac
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1200
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1860
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1920
gagtactttg ccaagaagct gcgggacgcc gtggtcgatg gcacccctg ctaccaggtc
1980
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2040
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<210> 2286

<211> 1784

<212> PRT

<213> Homo sapiens

<400> 2286

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			20					25					30		
Pro	Gly	Pro	Ala	Pro	Gly	Arg	Ala	Thr	Glu	Gly	Arg	Ala	Ala	Leu	Asp
			35				40					45			
Ile	Val	His	Pro	Val	Arg	Val	Asp	Ala	Gly	Gly	Ser	Phe	Leu	Ser	Tyr
	50				55						60				
Glu	Leu	Trp	Pro	Arg	Ala	Leu	Arg	Lys	Arg	Asp	Val	Ser	Val	Arg	Arg
65				70					75					80	
Asp	Ala	Pro	Ala	Phe	Tyr	Glu	Leu	Gln	Tyr	Arg	Gly	Arg	Glu	Leu	Arg
			85					90					95		
Phe	Asn	Leu	Thr	Ala	Asn	Gln	His	Leu	Leu	Ala	Pro	Gly	Phe	Val	Ser
			100					105					110		
Glu	Thr	Arg	Arg	Arg	Gly	Gly	Leu	Gly	Arg	Ala	His	Ile	Arg	Ala	His
			115				120					125			
Thr	Pro	Ala	Cys	His	Leu	Leu	Gly	Glu	Val	Gln	Asp	Pro	Glu	Leu	Glu
			130			135					140				
Gly	Gly	Leu	Ala	Ala	Ile	Ser	Ala	Cys	Asp	Gly	Leu	Lys	Gly	Val	Phe
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Gln	Leu	Ser	Asn	Glu	Asp	Tyr	Phe	Ile	Glu	Pro	Leu	Asp	Ser	Ala	Pro
			165					170					175		
Ala	Arg	Pro	Gly	His	Ala	Gln	Pro	His	Val	Val	Tyr	Lys	Arg	Gln	Ala
			180					185					190		
Pro	Glu	Arg	Leu	Ala	Gln	Arg	Gly	Asp	Ser	Ser	Ala	Pro	Ser	Thr	Cys

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Ser Ala Ser Val Pro Arg Ala Gly Val Ser Thr Gly Ala Leu Gly Ala		
210	215	220
Ala Ala Ala Val Ala Ala Ala Thr Ala Arg Arg Leu His Gln Arg Ser		
225	230	235
Val Ser Lys Glu Lys Trp Val Glu Thr Leu Val Val Ala Asp Ala Lys		
	245	250
Met Val Glu Tyr His Gly Gln Pro Gln Val Glu Ser Tyr Val Leu Thr		
	260	265
Ile Met Asn Met Val Ala Gly Leu Phe His Asp Pro Ser Ile Gly Asn		
	275	280
Pro Ile His Ile Thr Ile Val Arg Leu Val Leu Leu Glu Asp Glu Glu		
	290	295
Glu Asp Leu Lys Ile Thr His His Ala Asp Asn Thr Leu Lys Ser Phe		
305	310	315
Cys Lys Trp Gln Lys Ser Ile Asn Met Lys Gly Asp Ala His Pro Leu		
	325	330
His His Asp Thr Ala Ile Leu Leu Thr Arg Lys Asp Leu Cys Ala Ala		
	340	345
Met Asn Arg Pro Cys Glu Thr Leu Gly Leu Ser His Val Ala Gly Met		
	355	360
Cys Gln Pro His Arg Ser Cys Ser Ile Asn Glu Asp Thr Gly Leu Pro		
	370	375
Leu Ala Phe Thr Val Ala His Glu Leu Gly His Ser Phe Gly Ile Gln		
385	390	395
His Asp Gly Ser Gly Asn Asp Cys Glu Pro Val Gly Lys Arg Pro Phe		
	405	410
Ile Met Ser Pro Gln Leu Leu Tyr Asp Ala Ala Pro Leu Thr Trp Ser		
	420	425
Arg Cys Ser Arg Gln Tyr Ile Thr Arg Phe Leu Asp Arg Gly Trp Gly		
	435	440
Leu Cys Leu Asp Asp Pro Pro Ala Lys Asp Ile Ile Asp Phe Pro Ser		
	450	455
Val Pro Pro Gly Val Leu Tyr Asp Val Ser His Gln Cys Arg Leu Gln		
465	470	475
Tyr Gly Ala Tyr Ser Ala Phe Cys Glu Asp Met Asp Asn Val Cys His		
	485	490
Thr Leu Trp Cys Ser Val Gly Thr Thr Cys His Ser Lys Leu Asp Ala		
	500	505
Ala Val Asp Gly Thr Arg Cys Gly Glu Asn Lys Trp Cys Leu Ser Gly		
	515	520
Glu Cys Val Pro Val Gly Phe Arg Pro Glu Ala Val Asp Gly Gly Trp		
	530	535
Ser Gly Trp Ser Ala Trp Ser Ile Cys Ser Arg Ser Cys Gly Met Gly		
545	550	555
Val Gln Ser Ala Glu Arg Gln Cys Thr Gln Pro Thr Pro Lys Tyr Lys		
	565	570
Gly Arg Tyr Cys Val Gly Glu Arg Lys Arg Phe Arg Leu Cys Asn Leu		
	580	585
Gln Ala Cys Pro Ala Gly Arg Pro Ser Phe Arg His Val Gln Cys Ser		
	595	600
His Phe Asp Ala Met Leu Tyr Lys Gly Gln Leu His Thr Trp Val Pro		
	610	615
Val Val Asn Asp Val Asn Pro Cys Glu Leu His Cys Arg Pro Ala Asn		
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Glu Tyr Phe Ala Lys	Lys Leu Arg Asp Ala Val Val Asp Gly Thr Pro					
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Cys Tyr Gln Val Arg	Ala Ser Arg Asp Leu Cys Ile Asn Gly Ile Cys					
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Lys Asn Val Gly Cys	Asp Phe Glu Ile Asp Ser Gly Ala Met Glu Asp					
	675		680		685	
Arg Cys Gly Val Cys	His Gly Asn Gly Ser Thr Cys His Thr Val Ser					
	690		695		700	
Gly Thr Phe Xaa Arg	Arg Pro Arg Val Xaa Gly Tyr Val Asp Val Gly					
705	710		715		720	
Leu Ile Pro Ala Gly	Ala Arg Glu Ile Arg Ile Gln Glu Val Ala Glu					
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Ala Ala Asn Phe Leu	Ala Leu Arg Ser Glu Asp Pro Glu Lys Tyr Phe					
	740		745		750	
Leu Asn Gly Gly Trp	Thr Ile Gln Trp Asn Gly Asp Tyr Gln Val Ala					
	755		760		765	
Gly Thr Thr Phe Thr	Tyr Ala Arg Arg Gly Asn Trp Glu Asn Leu Thr					
	770		775		780	
Ser Pro Gly Pro Thr	Lys Glu Pro Val Trp Ile Gln Val Pro Ala Ser					
785	790		795		800	
Arg Gly Pro Gly Gly	Gly Ser Arg Gly Gly Val Pro Arg Pro Ser Thr					
	805		810		815	
Leu His Gly Arg Ser	Arg Pro Gly Gly Val Ser Pro Gly Ser Val Thr					
	820		825		830	
Glu Pro Gly Ser Glu	Pro Gly Pro Pro Ala Ala Ser Thr Ser Val					
	835		840		845	
Ser Pro Ser Leu Lys	Trp Pro Asn Leu Val Ala Ala Val His Arg Gly					
	850		855		860	
Gly Trp Gly Gln Ala	Pro Leu Gly Leu Gly Gly Trp Arg Arg His Leu					
865	870		875		880	
Val Leu Met Gly Pro	Arg Leu Pro Thr Gln Leu Leu Phe Gln Glu Ser					
	885		890		895	
Asn Pro Gly Val His	Tyr Glu Tyr Thr Ile His Arg Glu Ala Gly Gly					
	900		905		910	
His Asp Glu Val Pro	Pro Pro Val Phe Ser Trp His Tyr Gly Pro Trp					
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Thr Lys Cys Thr Val	Thr Cys Gly Arg Gly Val Gln Arg Gln Asn Val					
	930		935		940	
Tyr Cys Leu Glu Arg	Gln Ala Gly Pro Val Asp Glu Glu His Cys Asp					
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Pro Leu Gly Arg Pro	Asp Asp Gln Gln Arg Lys Cys Ser Glu Gln Pro					
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Cys Pro Ala Arg Trp	Trp Ala Gly Glu Trp Gln Leu Cys Ser Ser Ser					
	980		985		990	
Cys Gly Pro Gly Gly	Leu Ser Arg Ala Val Leu Cys Ile Arg Ser					
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Val Gly Leu Asp Glu	Gln Ser Ala Leu Glu Pro Pro Ala Cys Glu His					
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Leu Pro Arg Pro Pro	Thr Glu Thr Pro Cys Asn Arg His Val Pro Cys					
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Pro Ala Thr Trp Ala	Val Gly Asn Trp Ser Gln Cys Ser Val Thr Cys					
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Gly Glu Gly Thr Gln	Arg Arg Asn Val Leu Cys Thr Asn Asp Thr Gly					

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Leu Pro Leu Cys Arg Trp Pro Leu Gly Thr Leu Gly Pro Glu Gly Ser		
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Gly Ser Gly Ser Ser Ser His Glu Leu Phe Asn Glu Ala Asp Phe Ile		
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Pro His His Leu Ala Pro Arg Pro Ser Pro Ala Ser Ser Pro Lys Pro		
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Pro Gly Pro Val Phe Val Asp Asp Phe Tyr Tyr Asp Tyr Asn Phe Ile		
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Asn Phe His Glu Asp Leu Ser Tyr Gly Pro Ser Glu Glu Pro Asp Leu		
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Asp Leu Ala Gly Thr Gly Asp Arg Thr Pro Pro Pro His Ser His Pro		
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Ser Gln Ala Gly Arg Ser Pro Pro Pro Ser Glu Gln Thr Pro Gly		
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Pro Asp Leu Gly Leu Pro Ser Leu Ser Trp Pro Arg Val Ser Thr Asp		
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Gly Leu Gln Thr Pro Ala Thr Pro Glu Ser Gln Asn Asp Phe Pro Val		
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Gly Lys Asp Ser Gln Ser Gln Leu Pro Pro Pro Trp Arg Asp Arg Thr		
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Asn Glu Val Phe Lys Asp Asp Glu Glu Pro Lys Gly Arg Gly Ala Pro		
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His Leu Pro Pro Arg Pro Ser Ser Thr Leu Pro Pro Leu Ser Pro Val		
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Gly Ser Thr His Ser Ser Pro Ser Pro Asp Val Ala Glu Leu Trp Thr		
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Gly Gly Thr Val Ala Trp Glu Pro Ala Leu Glu Gly Gly Leu Gly Pro		
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Glu Pro Gly Thr Pro Ser Phe Pro Ala Pro Gly Pro Gly Ser Trp Asp		
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Leu Gln Thr Val Ala Val Trp Gly Thr Phe Leu Pro Thr Thr Leu Thr		
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Gln Pro Glu Ser Leu Ser Pro Glu Val Pro Leu Ser Ser Arg Leu Leu		
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Ser Thr Pro Ala Trp Asp Ser Pro Ala Asn Ser His Arg Val Pro Glu		
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Thr Gln Pro Leu Ala Pro Ser Leu Ala Glu Ala Gly Pro Pro Ala Asp		

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<210> 2287

<211> 750

<212> DNA

<213> Homo sapiens

<400> 2287

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<210> 2288

<211> 142

<212> PRT

<213> Homo sapiens

<400> 2288

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			20					25				30			
Ile	Phe	Leu	Tyr	Gly	Pro	Cys	Ser	Ser	Gln	Pro	Leu	Ile	Leu	Glu	Leu
			35				40					45			
Gly	Thr	Gly	Ser	Ala	Thr	Ser	Met	Leu	Leu	Ser	Cys	Cys	Ser	Pro	Ala
			50			55					60				
Trp	Asn	Val	Pro	Tyr	Leu	Ala	Asn	Ser	Tyr	Cys	Ser	Ser	Val	Thr	Leu
65					70				75					80	
Leu	Asp	Thr	Phe	Leu	Pro	Leu	Ser	Leu	Val	Arg	Cys	Ser	Pro	Leu	Gly
			85					90						95	
Ser	His	Gly	Pro	Leu	Cys	Val	Pro	Val	Val	Ala	Gln	Gln	Lys	Pro	Pro
			100					105					110		
Ala	Asp	Gly	Trp	Val	Ser	Cys	Pro	Glu	His	Gly	Ser	Leu	Arg	Ala	Glu
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Ser	Thr	Trp	Leu	Ser	Gly	Gly	Ala	Gln	Ser	His	Trp	Leu	His		
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<210> 2289

<211> 381

<212> DNA

<213> Homo sapiens

<400> 2289

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 gtgctgcaca agttctcggg ctacgggcag ctgtgcgagc gcggcctgga ggagctcacc
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<210> 2290

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2290

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Lys	Phe	Ser	Gly	Tyr	Gly	Gln	Leu	Cys	Glu	Arg	Gly	Leu	Glu	Glu	Leu
			20				25						30		
Ile	Asp	Tyr	Thr	Gly	Gly	Leu	Lys	His	Gln	Ile	Leu	Gln	Ser	His	Gly
	35					40					45				
Gln	Asp	Ala	Glu	Leu	Ser	Gly	Thr	Leu	Ser	Leu	Val	Leu	Thr	Gln	Gly
	50					55					60				
Cys	Lys	Arg	Ile	Xaa	Arg	Gly	Tyr	Trp	Phe	Lys	Asn	Trp	Pro	Pro	Thr
65					70				75					80	
Thr	Lys	Thr	Ser	Thr	Ala	Val	Phe	Leu	Gly	Leu	Glu	Lys	Pro	Leu	Met
				85				90						95	
Arg	Ile	His	Phe												
				100											

<210> 2291

<211> 573

<212> DNA

<213> Homo sapiens

<400> 2291

gcattgctcta ccgcaaagtc gggccccac cgattaaaaa tgccccgggtc gaggacagcc
 60
 ttccggcagca ccgactcatt atcggcaccg acctagtcaa ttgccaccac ctgcttatgc
 120
 aagtgggtcga tagaagcccc agccgggtta agccagttct ggaaaaccac cacatatcgc
 180
 acatgttcgt tgtgacgatg cagctgagcc attgaatcga cggtcagcgc catgaacgcc
 240
 cgatgctcgt tgacggtaag actcgccgac ccagcaacgt cggcggttgt cgtgccctca
 300
 tcgggtgtaat ggcgacgagc gacgatgacg tcatgtccgc cggcaaagaa ggctgcggaa
 360
 gcctcgcgta attcttgggg accgaggtcc tcggcgcgcc ggtctgaccc caccgccttg
 420
 aacttggcgt taaggaccga cctcacgtga gcctcccctg acgggttaga cagggtattcc
 480
 tcctgccagt cccgcgctgc ccgaggcaag ctcatccccc agttgagctg ccaataccgc
 540

cacgacagga tctcgaaaag attggggacg cgt
573

<210> 2292

<211> 140

<212> PRT

<213> Homo sapiens

<400> 2292

```
Met Ser Leu Pro Arg Ala Ala Arg Asp Trp Gln Glu Glu Tyr Leu Ser
  1           5           10           15
Asn Pro Ser Gly Glu Ala His Val Arg Ser Val Leu Asn Ala Lys Phe
      20           25           30
Lys Ala Val Gly Ser Asp Arg Arg Ala Glu Asp Leu Gly Pro Gln Glu
      35           40           45
Leu Arg Glu Ala Ser Ala Ala Phe Phe Ala Gly Gly His Asp Val Ile
      50           55           60
Val Ala Arg Arg His Tyr Thr Asp Glu Gly Thr Thr Thr Ala Asp Val
      65           70           75           80
Ala Gly Ser Ala Ser Leu Thr Val Asn Glu His Arg Ala Phe Met Ala
      85           90           95
Leu Thr Val Asp Ser Met Ala Gln Leu His Arg His Asn Glu His Val
      100          105          110
Arg Tyr Val Val Val Phe Gln Asn Trp Leu Lys Pro Ala Gly Ala Ser
      115          120          125
Ile Asp His Leu His Lys Gln Val Val Ala Ile Asp
      130          135          140
```

<210> 2293

<211> 358

<212> DNA

<213> Homo sapiens

<400> 2293

```
acgcgtgaag gaatggaagc tgctctcgtc ggtgcacaca agactggcgg gtgccattg
60
gtgaacactg tcgctaagaa ctggttgaac cggtcaca cgccggatat gaaaccact
120
gaggagatca agcggcagtt ccaaggtctg cattggttg gacgtaagta tggggtcaac
180
cacggagagt tctatcttga cgacgagcag tgggccacgc tcatggccgg gtcctcttcc
240
gaggcgaatc cgcgcattaa gagcaacttt gattccgagg gcgctgttgt ggatccggat
300
tccgattcac ttgctggggc tgatcgagat gcccgagggt cttcggatgc atgccttc
358
```

<210> 2294

<211> 115

<212> PRT

<213> Homo sapiens

<400> 2294

```
Met Glu Ala Ala Leu Val Gly Ala His Lys Thr Gly Gly Cys Pro Leu
```

1	5	10	15
Val Asn Thr	Val Ala Lys Asn Trp	Leu Asn Arg	Leu Asn Thr Pro Asp
20	25	30	
Met Lys Pro Thr	Glu Glu Ile Lys Arg Gln Phe	Gln Gly Leu His Trp	
35	40	45	
Leu Gly Arg Lys Tyr	Gly Leu Asn His Gly Glu Phe Tyr	Leu Asp Asp	
50	55	60	
Glu Gln Trp Ala Thr	Leu Met Ala Gly Ser Ser Phe Glu Ala Asn Pro		
65	70	75	80
Arg Ile Lys Ser Asn Phe Asp Ser	Glu Gly Ala Val Val Asp Pro Asp		
85	90	95	
Ser Asp Ser Leu Ala Gly Ala Asp	Arg Asp Ala Arg Gly Ala Ser Asp		
100	105	110	
Ala Cys Leu			
115			

<210> 2295

<211> 546

<212> DNA

<213> Homo sapiens

<400> 2295

```

ggcaccgata cgagtgggtgg tgccgggatt agnncggata tanaaacatt ctccgcctt
60
ggggcgatatg gctgctcggg cattaccgca ctggtagcgc aaaatacgcg cggcgtgcag
120
tcggtgtatc gtatcgaacc ggattttgtc ggtgcacaac tggactctgt gttcagcgat
180
gtccgcattg attccaccaa aatcggcatg ctggcagagg cggatatcgt ggaagcggtc
240
gcggagcgcc tcaaacatta tcgcgttaaa aacgtggtac ttgatacggg gatgctggcg
300
aaaagtggcg atccgctgct atctcctgct gctgtcgaaa ctctgcgaaa acaccttctg
360
ccacacgtcg cgctgatcac gccaaatttg ccggaggcgg cggcgtgctg ggatgcgcct
420
catgcccgtg cggagcacga gatgaaagag caggggcgcg cacttctggc gcttggctgc
480
gaggcagtgc tgatgaaagg cggccatctt gacgatctg agagcccga ctggctcttc
540
acgcgt
546

```

<210> 2296

<211> 182

<212> PRT

<213> Homo sapiens

<400> 2296

Gly Thr Asp	Pro Ser Gly Gly Ala Gly Ile Arg Xaa Asp	Leu Xaa Thr
1	5	10
Phe Ser Ala	Leu Gly Ala Tyr Gly Cys Ser Val Ile Thr Ala	Leu Val
20	25	30
Ala Gln Asn Thr Arg Gly Val Gln Ser Val Tyr Arg Ile	Glu Pro Asp	


```

      35          40          45
Phe Val Gly Ala Gln Leu Asp Ser Val Phe Ser Asp Val Arg Ile Asp
  50          55          60
Ser Thr Lys Ile Gly Met Leu Ala Glu Ala Asp Ile Val Glu Ala Val
  65          70          75          80
Ala Glu Arg Leu Lys His Tyr Arg Val Lys Asn Val Val Leu Asp Thr
      85          90          95
Val Met Leu Ala Lys Ser Gly Asp Pro Leu Leu Ser Pro Ala Ala Val
      100          105          110
Glu Thr Leu Arg Lys His Leu Leu Pro His Val Ala Leu Ile Thr Pro
      115          120          125
Asn Leu Pro Glu Ala Ala Ala Leu Leu Asp Ala Pro His Ala Arg Thr
      130          135          140
Glu His Glu Met Lys Glu Gln Gly Arg Ala Leu Leu Ala Leu Gly Cys
  145          150          155          160
Glu Ala Val Leu Met Lys Gly Gly His Leu Asp Asp Pro Glu Ser Pro
      165          170          175
Asp Trp Leu Phe Thr Arg
      180

```

<210> 2297

<211> 414

<212> DNA

<213> Homo sapiens

<400> 2297

```

gggaattccg ggcccttccc cccaagcccg ggtaattttt tgtattttta aaaaaaaagg
  60
gaattttccc acgttggggg ggggggggttc ggactttttc ccccaaaaac ccccccccc
  120
caccccccca aaggccgaaa agcagggcca aaaccccccg gacccccccc ggggggggca
  180
aaaggaaaaa cccctttttt tttttttttt ttttatacac atgaggggtct ctgggtaata
  240
aatgttgaga tgtaggggta ggtgagatta aacaggttct ttttttcattg atttctcgga
  300
gtctttatga tgctccacac cagtacttct caaagctgac tgtgtatata aaacactggg
  360
gatctgaccc acatgtaaag tctgatttct ttgggtctggg gcaggcctga aatn
  414

```

<210> 2298

<211> 67

<212> PRT

<213> Homo sapiens

<400> 2298

```

Lys Lys Arg Glu Phe Ser His Val Gly Gly Gly Gly Phe Gly Leu Phe
  1          5          10          15
Pro Pro Lys Thr Pro Pro Pro His Pro Pro Lys Gly Arg Lys Ala Gly
      20          25          30
Pro Lys Pro Pro Gly Pro Pro Pro Gly Gly Ala Lys Gly Lys Thr Pro
      35          40          45
Phe Phe Phe Phe Phe Tyr Thr His Glu Gly Leu Trp Leu Ile Asn

```

50
Val Glu Met
65

55

60

<210> 2299
<211> 987
<212> DNA
<213> Homo sapiens

<400> 2299
ngagatgtct aagttatctt ttttttcccg gaaggcaaat ggctggcgtg gaagcacaac
60
ccgctttcac tcttcgaatt tgtgcttagc tcttttcttg taccctgcga ctctgaccca
120
acatgctgtg atgtgtgccg agggaggaat tggtcagcta cacaacctgg atcttaccac
180
agtttgata tgactgagcg tctccaatgg gccagatata actggcgacg gctgatcaga
240
ggtgcaacca gggatgatga ttcagggcca tacaactatt cctcgttgct cgcctgtggg
300
cgcaagtcct ctccagatccc taaactgtca ggaaggcacc ggattgttgt tccccacatc
360
cagcccttca aggatgagta tgagaagttc tccggagcct atgtgaacaa tcgaatacga
420
acaacaaagt acacacttct gaattttgtg ccaagaaatt tatttgaaca atttcacaga
480
gctgccaatt tatatttctt gtctctagtt gtcttgaact gggtagcctt ggtagaagcc
540
ttccaaaagg aatcaccat gttgcctctg gtgggtgtcc ttacaattat cgcaattaaa
600
gatggcctgg aagattatcg gaaatacaaa attgacaaac agatcaataa tttataaact
660
aaagtttata gtaggaaaga gaaaaatac attgaccgat gctggaaaga cgttactgtt
720
ggggacttta ttgcctctc ctgcaacgag gtcacccctg cagacatggt actactcttt
780
tccactgac cagatggaat ctgtcacatt gagacttctg gtcttgatgg agagagcaat
840
ttaaacaga ggcagggtgt tcggggatat gcagaacagg actctgaagt tgatcctgag
900
aagttttcca gtaggataga atgtgaaagc ccaacaatg acctcagcag attccgaggc
960
ttcctagaac attccaacaa agaacgc
987

<210> 2300
<211> 266
<212> PRT
<213> Homo sapiens

<400> 2300
Met Thr Glu Ala Leu Gln Trp Ala Arg Tyr His Trp Arg Arg Leu Ile
1 5 10 15
Arg Gly Ala Thr Arg Asp Asp Asp Ser Gly Pro Tyr Asn Tyr Ser Ser

20 25 30
 Leu Leu Ala Cys Gly Arg Lys Ser Ser Gln Ile Pro Lys Leu Ser Gly
 35 40 45
 Arg His Arg Ile Val Val Pro His Ile Gln Pro Phe Lys Asp Glu Tyr
 50 55 60
 Glu Lys Phe Ser Gly Ala Tyr Val Asn Asn Arg Ile Arg Thr Thr Lys
 65 70 75 80
 Tyr Thr Leu Leu Asn Phe Val Pro Arg Asn Leu Phe Glu Gln Phe His
 85 90 95
 Arg Ala Ala Asn Leu Tyr Phe Leu Phe Leu Val Val Leu Asn Trp Val
 100 105 110
 Pro Leu Val Glu Ala Phe Gln Lys Glu Ile Thr Met Leu Pro Leu Val
 115 120 125
 Val Val Leu Thr Ile Ile Ala Ile Lys Asp Gly Leu Glu Asp Tyr Arg
 130 135 140
 Lys Tyr Lys Ile Asp Lys Gln Ile Asn Asn Leu Ile Thr Lys Val Tyr
 145 150 155 160
 Ser Arg Lys Glu Lys Lys Tyr Ile Asp Arg Cys Trp Lys Asp Val Thr
 165 170 175
 Val Gly Asp Phe Ile Arg Leu Ser Cys Asn Glu Val Ile Pro Ala Asp
 180 185 190
 Met Val Leu Leu Phe Ser Thr Asp Pro Asp Gly Ile Cys His Ile Glu
 195 200 205
 Thr Ser Gly Leu Asp Gly Glu Ser Asn Leu Lys Gln Arg Gln Val Val
 210 215 220
 Arg Gly Tyr Ala Glu Gln Asp Ser Glu Val Asp Pro Glu Lys Phe Ser
 225 230 235 240
 Ser Arg Ile Glu Cys Glu Ser Pro Asn Asn Asp Leu Ser Arg Phe Arg
 245 250 255
 Gly Phe Leu Glu His Ser Asn Lys Glu Arg
 260 265

<210> 2301

<211> 390

<212> DNA

<213> Homo sapiens

<400> 2301

tatcccaagc gcttcaaatt tgatgccgat gagttctact tgaaatcgtc cgaggaaatg
 60
 nncgccacct cttccgcgna tttccctgaa gcctgcgata acactatgga aatcgctgag
 120
 nncgttgcca cggtgaattc aacacaaacg caanactaca tgcccgattt cccaccccg
 180
 gagggggaga atgaggaatc ctggttcgtc aaagaagttg aacgcggttt gcactaccga
 240
 ttccccgagg gcattcccga tgacgtacgc aagcaggcag attatgaagt agggattatt
 300
 accgatgagg gattccccgg ctacttcttg gtggtcgcgg attttatcaa ctgggcgaag
 360
 aataacggaa ttcgagtggg ccccgggcgt
 390

<210> 2302

<211> 130
 <212> PRT
 <213> Homo sapiens

<400> 2302

```

Tyr Pro Lys Arg Phe Lys Phe Asp Ala Asp Glu Phe Tyr Leu Lys Ser
 1           5           10           15
Ser Glu Glu Met Xaa Ala Thr Ser Ser Ala Xaa Phe Pro Glu Ala Cys
      20           25           30
Asp Asn Thr Met Glu Ile Ala Glu Xaa Val Ala Thr Leu Asn Ser Thr
      35           40           45
Gln Thr Gln Xaa Tyr Met Pro Asp Phe Pro Thr Pro Glu Gly Glu Asn
      50           55           60
Glu Glu Ser Trp Phe Val Lys Glu Val Glu Arg Gly Leu His Tyr Arg
      65           70           75           80
Phe Pro Glu Gly Ile Pro Asp Asp Val Arg Lys Gln Ala Asp Tyr Glu
      85           90           95
Val Gly Ile Ile Thr Gln Met Gly Phe Pro Gly Tyr Phe Leu Val Val
      100          105          110
Ala Asp Phe Ile Asn Trp Ala Lys Asn Asn Gly Ile Arg Val Gly Pro
      115          120          125
Gly Arg
      130
  
```

<210> 2303
 <211> 638
 <212> DNA
 <213> Homo sapiens

<400> 2303

```

nnggatccag gctgcccttg tgtgtctcct tcagtcttcg ttagctgcct gctgctgtct
60
gcacctgtgt ttggtacct gggcgaccga catagccgca aggctaccat gagcttcggt
120
atcttgctgt gggtcaggagc tggcctctct agctccttca tctccccccg gtattcttgg
180
ctcttcttcc tgtcccgagg catcgagggc actgggtcgg ccagctactc caccatcgcg
240
cccaccgtcc tgggagacct ctctgtgagg gaccagcgca cccgctgtgt ggctgtcttc
300
tacatcttta tccccgttgg aagtgggtctg gggtacgtgc tggggtcggc tgtgacgatg
360
ctgactggga actggcgctg ggccctccga gtcatgccct gcttgagggc cgtggccttg
420
atcctgctta tcttgcctgt tccagaccca ccccgaggag ctgccgagac acagggggag
480
ggggccgtgg gaggcttcag aagcagctgg tgtgaggacg tcagatacct ggggaaaaac
540
tggagttttg tgtggtcgac cctcgagtg accgccatgg cctttgtgac tggagccctg
600
gggttctggg cccccaagtt tctgctcgag gcacgcgt
638
  
```

<210> 2304

<211> 212
 <212> PRT
 <213> Homo sapiens

<400> 2304
 Xaa Asp Pro Gly Cys Pro Cys Val Ser Pro Ser Val Phe Val Ser Cys
 1 5 10 15
 Leu Leu Leu Ser Ala Pro Val Phe Gly Tyr Leu Gly Asp Arg His Ser
 20 25 30
 Arg Lys Ala Thr Met Ser Phe Gly Ile Leu Leu Trp Ser Gly Ala Gly
 35 40 45
 Leu Ser Ser Ser Phe Ile Ser Pro Arg Tyr Ser Trp Leu Phe Phe Leu
 50 55 60
 Ser Arg Gly Ile Glu Gly Thr Gly Ser Ala Ser Tyr Ser Thr Ile Ala
 65 70 75 80
 Pro Thr Val Leu Gly Asp Leu Phe Val Arg Asp Gln Arg Thr Arg Val
 85 90 95
 Leu Ala Val Phe Tyr Ile Phe Ile Pro Val Gly Ser Gly Leu Gly Tyr
 100 105 110
 Val Leu Gly Ser Ala Val Thr Met Leu Thr Gly Asn Trp Arg Trp Ala
 115 120 125
 Leu Arg Val Met Pro Cys Leu Glu Ala Val Ala Leu Ile Leu Leu Ile
 130 135 140
 Leu Leu Val Pro Asp Pro Pro Arg Gly Ala Ala Glu Thr Gln Gly Glu
 145 150 155 160
 Gly Ala Val Gly Gly Phe Arg Ser Ser Trp Cys Glu Asp Val Arg Tyr
 165 170 175
 Leu Gly Lys Asn Trp Ser Phe Val Trp Ser Thr Leu Gly Val Thr Ala
 180 185 190
 Met Ala Phe Val Thr Gly Ala Leu Gly Phe Trp Ala Pro Lys Phe Leu
 195 200 205
 Leu Glu Ala Arg
 210

<210> 2305
 <211> 340
 <212> DNA
 <213> Homo sapiens

<400> 2305
 gccccgcct ctatcttccg gcatcgtcac agtcgcatcg tgacgggtact ggctggagtc
 60
 tcggaccagc acactttgac cgctcgtggtc gcctcgtgac atggggtaac gcgaacctcg
 120
 tcgctcctgt tcttgacctc ttccgtgccc ccattgacaa cgatcgggca agttcactgg
 180
 cccgcaacgc tattggtgac gcagcactcg cagctggtct cgaccgactc gtccacacca
 240
 cggcgtcggc gcgcgacgag ggcgatgagt tggcgtcgt tactcgcagc gctgctgccg
 300
 ccgcacgcaa ttccatgacg acaacgtgga gttggcgcgc
 340

<210> 2306

<211> 101
 <212> PRT
 <213> Homo sapiens

<400> 2306
 Met Glu Leu Arg Ala Ala Ala Ala Leu Arg Val Thr Thr Thr Asn
 1 5 10 15
 Ser Ser Pro Ser Ser Arg Thr Asp Ala Val Val Trp Thr Ser Arg Ser
 20 25 30
 Arg Pro Ala Ala Ser Ala Ala Ser Pro Ile Ala Leu Arg Ala Ser Glu
 35 40 45
 Leu Ala Arg Ser Leu Ser Met Gly Ala Arg Lys Arg Ser Arg Thr Gly
 50 55 60
 Ala Thr Arg Phe Ala Leu Pro His Val Thr Arg Arg Pro Arg Arg Ser
 65 70 75 80
 Lys Cys Ala Gly Pro Arg Leu Gln Pro Val Pro Ser Arg Cys Asp Cys
 85 90 95
 Asp Asp Ala Gly Arg
 100

<210> 2307
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 2307
 ngcttctcag ctgaaggggg agataaagct ctacataaga tgggtccagg tgggggcaaa
 60
 gccaaaggcac tgggtggggc tggcagtggg agcaagggct cagcaggtgg cggaagcaag
 120
 cgacggctga gcagcgaaga cagctccctg gagccagacc tggccgagat gagcctggat
 180
 gacagcagcc tggccctggg cgcagaggcc aggaccttcg ggggattccc tgagagccct
 240
 ccaccctgtc ctctccacgg tggctcccga ggcccttcca ctttcttcc tgagccccca
 300
 gatacttatg aagaagatgg tgatgagagt ggcaatgggc ttcccaaac caaagaggca
 360

<210> 2308
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 2308
 Xaa Phe Ser Ala Glu Gly Gly Asp Lys Ala Leu His Lys Met Gly Pro
 1 5 10 15
 Gly Gly Gly Lys Ala Lys Ala Leu Gly Gly Ala Gly Ser Gly Ser Lys
 20 25 30
 Gly Ser Ala Gly Gly Gly Ser Lys Arg Arg Leu Ser Ser Glu Asp Ser
 35 40 45
 Ser Leu Glu Pro Asp Leu Ala Glu Met Ser Leu Asp Asp Ser Ser Leu
 50 55 60
 Ala Leu Gly Ala Glu Ala Arg Thr Phe Gly Gly Phe Pro Glu Ser Pro

```

65          70          75          80
Pro Pro Cys Pro Leu His Gly Gly Ser Arg Gly Pro Ser Thr Phe Leu
      85          90          95
Pro Glu Pro Pro Asp Thr Tyr Glu Glu Asp Gly Asp Glu Ser Gly Asn
      100        105        110
Gly Leu Pro Lys Thr Lys Glu Ala
      115        120

```

<210> 2309
 <211> 395
 <212> DNA
 <213> Homo sapiens

```

<400> 2309
ggatccctac aaatggggcc ctgctctgag cacattccca tgagggctgc ctgccctgtg
60
cactctctgc cctggggccgc ggggcctgac tgggttccca cctcctccta cccactgggg
120
tcttttccag caggcacagg gattcctcat gggggaggca gagccacccc gtctgtcctc
180
ggtgacggcc tgagctgtgc acggcctccc ctgccctcct gttctcaggc cccccagggt
240
ccatccagcc ccagcgtgtg gcgttctggc tcttccttgg agtctcctcc cagaccagc
300
gactccactc acactgtgcc tagcggactg tgtggttgat gcagccggct cacttgagt
360
tggtgtgtta tgcccacaac aggcttgccg tcacc
395

```

<210> 2310
 <211> 108
 <212> PRT
 <213> Homo sapiens

```

<400> 2310
Met Gly Pro Cys Ser Glu His Ile Pro Met Arg Ala Ala Cys Pro Val
  1          5          10          15
His Ser Leu Pro Trp Ala Ala Gly Pro Asp Trp Val Pro Thr Ser Ser
      20          25          30
Tyr Pro Leu Gly Ser Phe Pro Ala Gly Thr Gly Ile Pro His Gly Gly
      35          40          45
Gly Arg Ala His Pro Ser Val Leu Gly Asp Gly Leu Ser Cys Ala Arg
      50          55          60
Pro Pro Leu Pro Ser Cys Ser Gln Ala Pro Gln Gly Pro Ser Ser Pro
65          70          75          80
Ser Val Trp Arg Ser Gly Ser Ser Leu Glu Ser Pro Pro Arg Pro Arg
      85          90          95
Asp Ser Thr His Thr Val Pro Ser Gly Leu Cys Gly
      100        105

```

<210> 2311
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 2311

gtgcacgccg agatgctgcc gcaagacaag cagcgtgtcg tcggcgagtt gaagcgccag
 60
 ggctttctcag tgatcaaggt cggcgatggc atcaatgatt gcgacgctct cgccgcgggc
 120
 gatgtcggca gtcccatggg cggcagcgcg gacgtggctc tcgaaacggc cgatgctgcc
 180
 gtccttcacg gacgggtggg ggacgtcttc gcgatgatcg ccctatcgaa gcgaaccatg
 240
 gccaacattc gacagaacat cgcgatcgcg atcgggctaa aggcggtggt cttgtgaacg
 300
 accgtcgteg gcatcacggg gctttggcct gcaatcctcg ccgatacggg gaccacggag
 360
 cttgtgacca tgaacgcg
 378

<210> 2312

<211> 126

<212> PRT

<213> Homo sapiens

<400> 2312

Val	His	Ala	Glu	Met	Leu	Pro	Gln	Asp	Lys	Gln	Arg	Val	Val	Gly	Glu
1				5					10					15	
Leu	Lys	Arg	Gln	Gly	Phe	Ser	Val	Ile	Lys	Val	Gly	Asp	Gly	Ile	Asn
		20						25					30		
Asp	Cys	Asp	Ala	Leu	Ala	Ala	Ala	Asp	Val	Gly	Ser	Pro	Met	Gly	Gly
	35						40					45			
Ser	Ala	Asp	Val	Ala	Leu	Glu	Thr	Ala	Asp	Ala	Ala	Val	Leu	His	Gly
	50					55					60				
Arg	Val	Gly	Asp	Val	Phe	Ala	Met	Ile	Ala	Leu	Ser	Lys	Arg	Thr	Met
65					70					75				80	
Ala	Asn	Ile	Arg	Gln	Asn	Ile	Ala	Ile	Ala	Ile	Gly	Leu	Lys	Ala	Val
			85					90						95	
Phe	Leu	Val	Thr	Thr	Val	Val	Gly	Ile	Thr	Gly	Leu	Trp	Pro	Ala	Ile
		100					105						110		
Leu	Ala	Asp	Thr	Gly	Thr	Thr	Glu	Leu	Val	Thr	Met	Asn	Ala		
		115					120					125			

<210> 2313

<211> 669

<212> DNA

<213> Homo sapiens

<400> 2313

ctagtggcat ggtctcgctg gtcttttagtg gagcataccg acacatcggt gactcaaacg
 60
 atccgaatca tggctcgctc tggttggcct ggaaccatta acgtacgcct caccatcgcc
 120
 ttaagcgacg ccggtctagc tgctgaagtc accgcgcgca atgtcggtag gacagcgggg
 180
 ccgcttggat acgcagcaca ccctatctc tgtctgggtg gcaccatcga cgactggaca
 240

gtcgacgccc cgtttacctc gtggttacag gtcgatgac ggctgctacc aatgcagatg
 300
 cgcgagatgg acagcatcca cgcgctgaac ggtctcacgg gcggacagcg caccttcgat
 360
 accgcttaca ccgtgaaagg aggacggaac cgtcggatcg cccgcatggc gtatccgggt
 420
 ctcaacgggtg aaacgagcca cgaattgtgg ggcgacgccg cgatgagctg ggtgcaagtc
 480
 tacactccag acgaccgcca cagtctggcc atcgagccaa tgacctgcgg cccagatgca
 540
 tttaatgagg gcccgaacca cggtgacgtc attcgactgg agccccgtaa tgacgtcaca
 600
 ctgcactggg gcacgccta acccgcgaa gctcgaaagg acaaggacgg gaaggcagga
 660
 ttcacgcgt
 669

<210> 2314

<211> 206

<212> PRT

<213> Homo sapiens

<400> 2314

Leu	Val	Ala	Trp	Ser	Arg	Trp	Ser	Leu	Val	Glu	His	Thr	Asp	Thr	Ser
1				5					10					15	
Val	Thr	Gln	Thr	Ile	Arg	Ile	Met	Ala	Arg	Pro	Gly	Trp	Pro	Gly	Thr
			20					25					30		
Ile	Asn	Val	Arg	Leu	Thr	His	Arg	Leu	Ser	Asp	Ala	Gly	Leu	Ala	Val
		35					40					45			
Glu	Val	Thr	Ala	Arg	Asn	Val	Gly	Thr	Thr	Ala	Gly	Pro	Leu	Gly	Tyr
	50					55				60					
Ala	Ala	His	Pro	Tyr	Leu	Cys	Leu	Gly	Gly	Thr	Ile	Asp	Asp	Trp	Thr
65					70					75				80	
Val	Asp	Ala	Pro	Phe	Thr	Ser	Trp	Leu	Gln	Val	Asp	Asp	Arg	Leu	Leu
			85					90						95	
Pro	Met	Gln	Met	Arg	Glu	Met	Asp	Ser	Ile	His	Ala	Leu	Asn	Gly	Leu
			100					105					110		
Thr	Gly	Gly	Gln	Arg	Thr	Phe	Asp	Thr	Ala	Tyr	Thr	Val	Lys	Gly	Gly
		115					120					125			
Arg	Asn	Arg	Arg	Ile	Ala	Arg	Met	Ala	Tyr	Pro	Gly	Leu	Asn	Gly	Glu
	130					135				140					
Thr	Ser	His	Glu	Leu	Trp	Gly	Asp	Ala	Ala	Met	Ser	Trp	Val	Gln	Val
145					150					155				160	
Tyr	Thr	Pro	Asp	Asp	Arg	His	Ser	Leu	Ala	Ile	Glu	Pro	Met	Thr	Cys
			165					170						175	
Gly	Pro	Asp	Ala	Phe	Asn	Glu	Gly	Pro	Thr	His	Gly	Asp	Val	Ile	Arg
			180					185					190		
Leu	Glu	Pro	Gly	Asn	Asp	Val	Thr	Leu	His	Trp	Gly	Ile	Ala		
		195					200					205			

<210> 2315

<211> 546

<212> DNA

<213> Homo sapiens

<400> 2315

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 120
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 180
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 240
 gttgaggtcg aggggtgcccc gaccggtatt cagcaggctg tcaggtggaa cttttccag
 300
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 360
 tcaggctatg aaggccacta cttttgggac actgaggttt atgtcatccc gatgttgacc
 420
 tacactcatc caagaatcgc tgagaatgcg ctgagattcc ggggtgaatac cttccgcaa
 480
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 540
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 546

<210> 2316

<211> 182

<212> PRT

<213> Homo sapiens

<400> 2316

Xaa	Ala	Ser	Leu	Ile	Asp	Thr	Glu	Pro	Gly	Met	Gly	Lys	Arg	Val	Tyr
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Arg	Val	Glu	Ala	Thr	Gln	Gly	Arg	Pro	Ile	Arg	Ile	Asp	Lys	Ala	Val
		20						25					30		
Ala	Tyr	His	Thr	Ser	Arg	Gly	Val	Pro	Val	His	Glu	Leu	Phe	Asp	Arg
		35					40					45			
Val	Arg	Arg	Ser	Leu	Asp	Arg	Val	Arg	Glu	Gln	Gly	His	Asn	Val	Tyr
	50					55				60					
Tyr	Asp	Glu	Gln	Arg	Ala	Trp	Leu	Asp	Asp	Tyr	Trp	Ala	Thr	Ala	Asp
65					70					75				80	
Val	Glu	Val	Glu	Gly	Ala	Pro	Thr	Gly	Ile	Gln	Gln	Ala	Val	Arg	Trp
			85					90					95		
Asn	Leu	Phe	Gln	Ile	Ala	Gln	Ala	Ser	Ala	Arg	Ala	Asp	Gln	Leu	Gly
		100						105					110		
Ile	Pro	Ala	Lys	Gly	Val	Thr	Gly	Ser	Gly	Tyr	Glu	Gly	His	Tyr	Phe
	115						120					125			
Trp	Asp	Thr	Glu	Val	Tyr	Val	Ile	Pro	Met	Leu	Thr	Tyr	Thr	His	Pro
	130					135					140				
Arg	Ile	Ala	Glu	Asn	Ala	Leu	Arg	Phe	Arg	Val	Asn	Thr	Leu	Pro	Gln
145					150					155				160	
Ala	Arg	Arg	Arg	Ala	Lys	Glu	Leu	Ser	Glu	Arg	Gly	Ala	Leu	Phe	Pro
			165						170					175	
Trp	Arg	Thr	Ile	Thr	Gly										
			180												

<210> 2317

<211> 496

<212> DNA

<213> Homo sapiens

<400> 2317

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120
cagctgctga cgctgctgtg atgccgagga gatcggagac gattcgtggg tgcacttgcc
180
gggtcagttc gatcagcgcg gtcgttcgag cgcttctga acgcagcccc tgctggcgca
240
gacgtcggct gagtgggcct ggtgtgagat gcaaccccg attcctgcca ggaaagagcc
300
atccctcggg tcggtgtctc gatgtgtcag cgagctcggc gatcgcatte ccgaggacct
360
cgggcagttc gattggctcg gtcctgatgg tgagcttccc cggctgtgat gtcacgtcga
420
cctgctcacg ggtgagcgcg acgatgcgag tgaggtggag gccgtagagg agcacgagca
480
acccagcggc acgcgt
496

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<210> 2318

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2318

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Met Pro Arg Arg Ser Glu Thr Ile Arg Gly Cys Ile Cys Arg Val Ser
1      5      10      15
Ser Ile Ser Ala Val Val Arg Ala Leu Pro Glu Arg Ser Pro Cys Trp
20     25     30
Arg Arg Arg Arg Leu Ser Gly Pro Gly Val Arg Cys Asn Pro Gly Phe
35     40     45
Leu Pro Gly Lys Ser His Pro Ser Gly Arg Cys Leu Asp Val Ser Ala
50     55     60
Ser Ser Ala Ile Ala Phe Pro Arg Thr Ser Gly Ser Ser Ile Gly Ser
65     70     75     80
Ala Pro Met Val Ser Phe Pro Gly Arg Asp Val Thr Ser Thr Cys Ser
85     90     95
Arg Val Ser Ala Thr Met Arg Val Arg Trp Arg Pro
100    105

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<210> 2319

<211> 1748

<212> DNA

<213> Homo sapiens

<400> 2319

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120
tttatagtga aaccagctaa tgggtgcaatg ggtcatggga tttctttgat aagaaatggg
180
gacaaacttc catctcagga tcatttgatt gttcaagaat acattgaaaa gcctttccta
240
atggaagggtt acaagtttga cttacgaatt tatattctgg ttacatcgtg tgatccacta
300
aaaatatttc tctaccatga tgggcttggt cgaatgggta cagagaagta cattccacct
360
aatgagtcca atttgaccca gttatacatg catctgacaa actactccgt gaacaagcat
420
aatgagcatt ttgaacggga tgaaactgag aacaaaggca gcaaacttc catcaaagg
480
tttacagaat tccttcaagc aaatcaacat gatgttgcta agttttggag tgatatttca
540
gaattggtgg taaagaccct gattgtagca gaacctcatg tcctgcatgc ctatcgaatg
600
tgtagacctg gtcaacctcc aggaagcgaa agtgtctgct ttgaagtcct gggatttgat
660
attttgttgg atagaaaact aaagccatgg cttctggaga ttaaccgagc cccaagcttt
720
ggaactgata agaaaataga ctatgatgta aaaaggggag tgctgctaaa tgcgttgaag
780
ctactaaaca taaggaccag tgacaaaaga agaaacttgg ccaaacaaaa agctgaggct
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900
gaacagcaga gacaccagtt ggagaggcgg aaagaagagt tgaaagagag actcgtctaa
960
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1020
atttatcctc ctgaagataa agcattactt gaaaagtatg aaaatttgtt agctgttgcc
1080
tttcagacct tcctttcagg aagagcagct tcattccagc gagagttaa taatcctttg
1140
aaaaggatga aggaagaaga tattttggat cttctggagc aatgtgaaat tgatgatgaa
1200
aagttgatgg gaaaaactac caagactcga ggaccaaagc ctctgtgttc tatgcctgag
1260
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1320
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1380
aagcaagtta catataatct taaacctcc aaccactaca aattaattca acaaccagc
1440
tcataagac gttcagtcag ctgccctcgg tccatctctg ctcaatcacc ttccagtggtg
1500
gacacccgcc cattttctgc tcaacaaatg atatctgtgt cacggccaac ttctgcatct
1560
cggtcacatt ccttaaaccg gggccttctt cctacatgag gcattctgcct cacagtaatg
1620
atgcctgctc taccaactct caagtgagt agtctttgct gcaactgaaa acaaaagaac
1680

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 1740
 caggaaag
 1748

<210> 2320

<211> 532

<212> PRT

<213> Homo sapiens

<400> 2320

Xaa	Ile	Lys	Ser	Arg	Ser	Leu	Asp	Tyr	Thr	Phe	Val	Pro	Arg	Thr	Trp
1			5						10					15	
Ile	Phe	Pro	Ala	Glu	Tyr	Thr	Gln	Phe	Gln	Asn	Tyr	Val	Lys	Glu	Leu
		20					25					30			
Lys	Lys	Lys	Arg	Lys	Gln	Lys	Thr	Phe	Ile	Val	Lys	Pro	Ala	Asn	Gly
		35					40					45			
Ala	Met	Gly	His	Gly	Ile	Ser	Leu	Ile	Arg	Asn	Gly	Asp	Lys	Leu	Pro
	50					55					60				
Ser	Gln	Asp	His	Leu	Ile	Val	Gln	Glu	Tyr	Ile	Glu	Lys	Pro	Phe	Leu
65				70					75					80	
Met	Glu	Gly	Tyr	Lys	Phe	Asp	Leu	Arg	Ile	Tyr	Ile	Leu	Val	Thr	Ser
			85					90					95		
Cys	Asp	Pro	Leu	Lys	Ile	Phe	Leu	Tyr	His	Asp	Gly	Leu	Val	Arg	Met
		100						105					110		
Gly	Thr	Glu	Lys	Tyr	Ile	Pro	Pro	Asn	Glu	Ser	Asn	Leu	Thr	Gln	Leu
		115					120					125			
Tyr	Met	His	Leu	Thr	Asn	Tyr	Ser	Val	Asn	Lys	His	Asn	Glu	His	Phe
	130				135						140				
Glu	Arg	Asp	Glu	Thr	Glu	Asn	Lys	Gly	Ser	Lys	Arg	Ser	Ile	Lys	Trp
145					150					155				160	
Phe	Thr	Glu	Phe	Leu	Gln	Ala	Asn	Gln	His	Asp	Val	Ala	Lys	Phe	Trp
			165					170						175	
Ser	Asp	Ile	Ser	Glu	Leu	Val	Val	Lys	Thr	Leu	Ile	Val	Ala	Glu	Pro
		180						185					190		
His	Val	Leu	His	Ala	Tyr	Arg	Met	Cys	Arg	Pro	Gly	Gln	Pro	Pro	Gly
	195					200						205			
Ser	Glu	Ser	Val	Cys	Phe	Glu	Val	Leu	Gly	Phe	Asp	Ile	Leu	Leu	Asp
	210				215					220					
Arg	Lys	Leu	Lys	Pro	Trp	Leu	Leu	Glu	Ile	Asn	Arg	Ala	Pro	Ser	Phe
225				230						235				240	
Gly	Thr	Asp	Gln	Lys	Ile	Asp	Tyr	Asp	Val	Lys	Arg	Gly	Val	Leu	Leu
			245					250						255	
Asn	Ala	Leu	Lys	Leu	Leu	Asn	Ile	Arg	Thr	Ser	Asp	Lys	Arg	Arg	Asn
		260						265					270		
Leu	Ala	Lys	Gln	Lys	Ala	Glu	Ala	Gln	Arg	Arg	Leu	Tyr	Gly	Gln	Asn
	275					280						285			
Ser	Ile	Lys	Arg	Leu	Leu	Pro	Gly	Ser	Ser	Asp	Trp	Glu	Gln	Gln	Arg
	290					295					300				
His	Gln	Leu	Glu	Arg	Arg	Lys	Glu	Glu	Leu	Lys	Glu	Arg	Leu	Ala	Gln
305				310						315				320	
Val	Arg	Lys	Gln	Ile	Ser	Arg	Glu	Glu	His	Glu	Asn	Arg	His	Met	Gly
			325					330						335	
Asn	Tyr	Arg	Arg	Ile	Tyr	Pro	Pro	Glu	Asp	Lys	Ala	Leu	Leu	Glu	Lys

340 345 350
 Tyr Glu Asn Leu Leu Ala Val Ala Phe Gln Thr Phe Leu Ser Gly Arg
 355 360 365
 Ala Ala Ser Phe Gln Arg Glu Leu Asn Asn Pro Leu Lys Arg Met Lys
 370 375 380
 Glu Glu Asp Ile Leu Asp Leu Leu Glu Gln Cys Glu Ile Asp Asp Glu
 385 390 395 400
 Lys Leu Met Gly Lys Thr Thr Lys Thr Arg Gly Pro Lys Pro Leu Cys
 405 410 415
 Ser Met Pro Glu Ser Thr Glu Ile Met Lys Arg Pro Lys Tyr Cys Ser
 420 425 430
 Ser Asp Ser Ser Tyr Asp Ser Ser Ser Ser Ser Ser Glu Ser Asp Glu
 435 440 445
 Asn Glu Lys Glu Glu Tyr Gln Asn Lys Lys Arg Glu Lys Gln Val Thr
 450 455 460
 Tyr Asn Leu Lys Pro Ser Asn His Tyr Lys Leu Ile Gln Gln Pro Ser
 465 470 475 480
 Ser Ile Arg Arg Ser Val Ser Cys Pro Arg Ser Ile Ser Ala Gln Ser
 485 490 495
 Pro Ser Ser Gly Asp Thr Arg Pro Phe Ser Ala Gln Gln Met Ile Ser
 500 505 510
 Val Ser Arg Pro Thr Ser Ala Ser Arg Ser His Ser Leu Asn Pro Gly
 515 520 525
 Leu Pro Pro Thr
 530

<210> 2321

<211> 433

<212> DNA

<213> Homo sapiens

<400> 2321

 caattgtgtg gacgtgtcta tgtgtgtttc taattctata ctatcttgaa aatgggttcag
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 cggttctagaa atacagccac ataatttttt ttgttttgaa aaactgctca gcaaatgcat
 120

 acaggtcata atggcaggta acagaccatt tattgaagtg ctgaaacaaa tagaaaacaa
 180

 agtccaggac accatcacag agcagtactt cccttggtgag atactctcag ctaagtaaga
 240

 attgagttag acaacaataa aacaaatacc cataggcttt tcaaacagta acaaccgct
 300

 cagggttagc agcatttcta gaccttgatg gtaaaatgat gttctcaacc tttgctttca
 360

 gacactggat cactgcttaa gtagccttta tcttttcccc ctaatttttg ttgaagatgc
 420

cagaggtgga gtg

433

<210> 2322

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2322

Met Leu Leu Thr Leu Ser Gly Leu Leu Leu Phe Glu Lys Pro Met Gly
 1 5 10 15
 Ile Cys Phe Ile Val Val Ser Leu Asn Ser Tyr Leu Ala Glu Ser Ile
 20 25 30
 Ser Gln Gly Lys Tyr Cys Ser Val Met Val Ser Trp Thr Leu Phe Ser
 35 40 45
 Ile Cys Phe Ser Thr Ser Ile Asn Gly Leu Leu Pro Ala Ile Met Thr
 50 55 60
 Cys Met His Leu Leu Ser Ser Phe Ser Lys Gln Lys Lys Leu Cys Gly
 65 70 75 80
 Cys Ile Ser Arg Thr Leu Asn His Phe Gln Asp Ser Ile Glu Leu Glu
 85 90 95
 Thr His Ile Asp Thr Ser Thr Gln Leu
 100 105

<210> 2323

<211> 532

<212> DNA

<213> Homo sapiens

<400> 2323

acgcgtcaaa actggcaaag ctggcggcctt agggggaggg gcaagtggac ttggaggccc
 60
 tcctccactg tgcacccccct tggaaaaaaa gcggaggggg catcaagtaa aagtttcttg
 120
 ccaggcagag ccagctcggc ggccccccgc acatagctgg ggtagcagg ggttgcttct
 180
 ctgccgggca cagcgtctc caggagccag ccggggagag ctgagccaag gccgaaggag
 240
 ccgctcggg gcttagccgc cccctccgc ccgttgccc cagagcggac gctgggacgc
 300
 ccggggtctg gcagctctgc gcccggtag gagcgggagg gcgagcatta gcctgcgtcc
 360
 tggagaaggg gcgcagcgcc gcagttgagg ccgaagcagc ccctcgggg cgtaggatac
 420
 ctgtcagtga gcgcccgat tgcacggccc ccgggtagt cctgccggcg aggggcggga
 480
 gctcgggtga cttggccatc cccatccccg gcccaggccc ggagggcggc cg
 532

<210> 2324

<211> 51

<212> PRT

<213> Homo sapiens

<400> 2324

Thr Arg Gln Asn Trp Gln Ser Trp Arg Leu Arg Gly Arg Gly Lys Trp
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 Thr Trp Arg Pro Ser Ser Thr Val His Pro Leu Gly Lys Lys Ala Glu
 20 25 30
 Gly Ala Ser Ser Lys Ser Phe Leu Pro Gly Arg Ala Ser Ser Ala Ala
 35 40 45
 Pro Arg Thr

50

<210> 2325
 <211> 459
 <212> DNA
 <213> Homo sapiens

<400> 2325
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 gatgagaacc gttttgtggc cgttaccagt tccaacgcag ctaagcttct gaacctgtat
 120
 ccccgcaagg gccgcattat tcccgagacc gatgctgatg tgggtggtg ggacccagaa
 180
 gccacaaaga ccatctcagc cagcacgcag gtccagggag gagacttcaa cctgtatgag
 240
 aacatgcgt gccacggcgt gccactggc accatcagcc gggggcgcgt cgtgtatgag
 300
 aacggcgtct tcatgtgcgc cgagggcacc ggcaagttct gtccctgag gtccttccca
 360
 gacactgtct acaagaagct ggtccagaga gagaagactt taaagggttag aggagtggcc
 420
 cgcactccct acctggggga tgctgctgtt gtcgtgcac
 459

<210> 2326
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 2326
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 Gly Gly Lys Met Asp Glu Asn Arg Phe Val Ala Val Thr Ser Ser Asn
 20 25 30
 Ala Ala Lys Leu Leu Asn Leu Tyr Pro Arg Lys Gly Arg Ile Ile Pro
 35 40 45
 Gly Ala Asp Ala Asp Val Val Val Trp Asp Pro Glu Ala Thr Lys Thr
 50 55 60
 Ile Ser Ala Ser Thr Gln Val Gln Gly Gly Asp Phe Asn Leu Tyr Glu
 65 70 75 80
 Asn Met Arg Cys His Gly Val Pro Leu Val Thr Ile Ser Arg Gly Arg
 85 90 95
 Val Val Tyr Glu Asn Gly Val Phe Met Cys Ala Glu Gly Thr Gly Lys
 100 105 110
 Phe Cys Pro Leu Arg Ser Phe Pro Asp Thr Val Tyr Lys Lys Leu Val
 115 120 125
 Gln Arg Glu Lys Thr Leu Lys Val Arg Gly Val Ala Arg Thr Pro Tyr
 130 135 140
 Leu Gly Asp Val Ala Val Val Val His
 145 150

<210> 2327
 <211> 599

<212> DNA

<213> Homo. sapiens

<400> 2327

gaattccaga agatcaagta ttcctacgat gccctggaga agaagcagtt tctccccgtg
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gcctttcctg tgggaaacgc cttctcatac tatcagagca acagaggcct ccaggaagac
120
tcagagatcc gagcagctga gaagaaattt gggagcaaca aggccgagat ggtggtgcct
180
gacttctcgg agcttttcaa ggagagagcc acagccccct tctttgtatt tcaggtgttc
240
tgtgtggggc tctggtgcct ggatgagtag tggtactaca gcgtctttac gctatccatg
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420
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480
gtcccagtgg gagccccagc ctcagggcct ctggccaacc ctctgcctc tgccctgcag
540
gccgctcccc acaggagaac ctggtgccat gtgacgtgct tctgctgcga ggccgctgc
599

<210> 2328

<211> 199

<212> PRT

<213> Homo sapiens

<400> 2328

Glu	Phe	Gln	Lys	Ile	Lys	Tyr	Ser	Tyr	Asp	Ala	Leu	Glu	Lys	Lys	Gln
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Phe	Leu	Pro	Val	Ala	Phe	Pro	Val	Gly	Asn	Ala	Phe	Ser	Tyr	Tyr	Gln
			20					25					30		
Ser	Asn	Arg	Gly	Phe	Gln	Glu	Asp	Ser	Glu	Ile	Arg	Ala	Ala	Glu	Lys
		35				40					45				
Lys	Phe	Gly	Ser	Asn	Lys	Ala	Glu	Met	Val	Val	Pro	Asp	Phe	Ser	Glu
	50				55						60				
Leu	Phe	Lys	Glu	Arg	Ala	Thr	Ala	Pro	Phe	Phe	Val	Phe	Gln	Val	Phe
65				70					75					80	
Cys	Val	Gly	Leu	Trp	Cys	Leu	Asp	Glu	Tyr	Trp	Tyr	Tyr	Ser	Val	Phe
			85					90					95		
Thr	Leu	Ser	Met	Leu	Val	Ala	Phe	Glu	Ala	Ser	Leu	Val	Gln	Gln	Gln
			100					105					110		
Met	Arg	Asn	Met	Ser	Glu	Ile	Arg	Lys	Met	Gly	Asn	Lys	Pro	His	Met
		115				120					125				
Ile	Gln	Val	Tyr	Arg	Ser	Arg	Lys	Trp	Arg	Pro	Ile	Ala	Ser	Asp	Glu
	130				135						140				
Ile	Val	Pro	Gly	Asp	Ile	Val	Ser	Ile	Gly	Glu	Ala	Gly	Phe	Arg	Ser
145				150					155					160	
Val	Pro	Val	Gly	Ala	Pro	Ala	Ser	Gly	Pro	Leu	Ala	Asn	Pro	Pro	Ala
			165					170					175		
Ser	Ala	Leu	Gln	Ala	Ala	Pro	His	Arg	Arg	Thr	Trp	Cys	His	Val	Thr

180
Cys Phe Cys Cys Glu Ala Ala
195

185

190

<210> 2329
<211> 392
<212> DNA
<213> Homo sapiens

<400> 2329
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120
atgagcacgc aaccactga ggaaccactc cgactagtgt tggcattcaa tccagtgcct
180
agtgcctccc gggttgctca tcatcatgcg acgagatttc gcctggcggg gcaggccttc
240
attgtcgtcg tcattggtgg tttgtgtgg gcgttgacgg ccgacgcctt ccagttatcg
300
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360
aatctgcggc tgcacgccgc tcgcaaggat cc
392

<210> 2330
<211> 90
<212> PRT
<213> Homo sapiens

<400> 2330
Met Ser Thr Gln Pro Thr Glu Glu Pro Leu Arg Leu Val Val Ala Phe
1 5 10 15
Asn Pro Val Pro Ser Ala Ser Arg Val Ala His His His Ala Thr Arg
20 25 30
Phe Arg Leu Ala Val Gln Ala Phe Ile Val Val Val Ile Gly Gly Leu
35 40 45
Leu Trp Ala Leu Thr Ala Asp Ala Phe Gln Leu Ser Thr Val Met Trp
50 55 60
Met Leu Gly Ala Trp Val Val Leu Phe Leu Val Leu Phe Val Ile Gln
65 70 75 80
Asn Leu Arg Leu His Ala Ala Arg Lys Asp
85 90

<210> 2331
<211> 2813
<212> DNA
<213> Homo sapiens

<400> 2331
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gatttaagggt gcccagagtc acgctgatgg actgccgtag acaactgaaa gacagtaagc
120

aaattttatc tattacaaag aacttttaaag ttgagaatat tggacctctt cctataactg
180
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240
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300
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360
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420
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780
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900
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1080
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1140
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1200
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1260
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1320
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1380
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1440
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1620
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1680
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1740

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 1920
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 1980
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 2040
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 2100
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 2160
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 2220
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 2280
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 2340
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 2400
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 2460
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 2520
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 2580
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 2640
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 2700
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 2760
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 2813

<210> 2332

<211> 789

<212> PRT

<213> Homo sapiens

<400> 2332

Pro Asp Phe Thr Ser Ser Trp Val Ile Arg Asp Leu Ser Leu Val Thr
 1 5 10 15
 Ala Ala Asp Leu Glu Phe Arg Phe Thr Leu Asn Val Thr Leu Pro His
 20 25 30
 His Leu Leu Pro Leu Cys Ala Asp Val Val Pro Gly Pro Ser Trp Glu
 35 40 45
 Glu Ser Phe Trp Arg Leu Thr Val Phe Phe Val Ser Leu Ser Leu Leu
 50 55 60
 Gly Val Ile Leu Ile Ala Phe Gln Gln Ala Gln Tyr Ile Leu Met Glu
 65 70 75 80
 Phe Met Lys Thr Arg Gln Arg Gln Asn Ala Ser Ser Ser Ser Gln Gln

1705

515 520 525
 Asp Ser Val Ser Gln Asn Asp Phe Pro Ser Glu Ala Pro Ile Ser Leu
 530 535 540
 Asn Leu Ser His Asn Ile Cys Asn Pro Met Thr Val Asn Ser Leu Pro
 545 550 555 560
 Gln Tyr Ala Glu Pro Ser Cys Pro Ser Leu Pro Ala Gly Pro Thr Gly
 565 570 575
 Val Glu Glu Asp Lys Gly Leu Tyr Ser Pro Gly Asp Leu Trp Pro Thr
 580 585 590
 Pro Pro Val Cys Val Thr Ser Ser Leu Asn Cys Thr Leu Glu Asn Gly
 595 600 605
 Val Pro Cys Val Ile Gln Glu Ser Ala Pro Val His Asn Ser Phe Ile
 610 615 620
 Asp Trp Ser Ala Thr Cys Glu Gly Gln Phe Ser Ser Ala Tyr Cys Pro
 625 630 635 640
 Leu Glu Leu Asn Asp Tyr Asn Ala Phe Pro Glu Glu Asn Met Asn Tyr
 645 650 655
 Ala Asn Gly Phe Pro Cys Pro Ala Asp Val Gln Thr Asp Phe Ile Asp
 660 665 670
 His Asn Ser Gln Ser Thr Trp Asn Thr Pro Pro Asn Met Pro Ala Ala
 675 680 685
 Trp Gly His Ala Ser Phe Ile Ser Ser Pro Pro Tyr Leu Thr Ser Thr
 690 695 700
 Arg Ser Leu Ser Pro Met Ser Gly Leu Phe Gly Ser Ile Trp Ala Pro
 705 710 715 720
 Gln Ser Asp Val Tyr Glu Asn Cys Cys Pro Ile Asn Pro Thr Thr Glu
 725 730 735
 His Ser Thr His Met Glu Asn Gln Ala Val Val Cys Lys Glu Tyr Tyr
 740 745 750
 Pro Gly Phe Asn Pro Phe Arg Ala Tyr Met Asn Leu Asp Ile Trp Thr
 755 760 765
 Thr Thr Ala Asn Arg Asn Ala Asn Phe Pro Leu Ser Arg Asp Ser Ser
 770 775 780
 Tyr Cys Gly Asn Val
 785

<210> 2333

<211> 501

<212> DNA

<213> Homo sapiens

<400> 2333

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 120
 gacgaagttc ttcacaaagc aaaatcatat ttgtcagcag atgaatatga gtatgtttta
 180
 aaaagctatc atattgctta tgaagcacat aaaggtcagt tccgaaaaaa cggattacca
 240
 tacattatgc atcctataca agttgcaggt attttaacag aaatgcgatt agacggaccg
 300
 acgattgtcg caggtttttt gcatgatgta attgaagata caccgtatac atttgaagat
 360

gtaaaagaaa tgttcaatga agaagttgct cgaattgttg atgggtgtgac gaagcttaaa
 420
 aaaataaaaat accgctcaaa agaagaacaa caagctgaaa atcatcgcaa gttattttatt
 480
 gcgattgccca aagatgtacg c
 501

<210> 2334
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 2334
 Met Asn Gly Val Tyr His Ile Met Asn Asn Glu Tyr Pro Tyr Ser Ala
 1 5 10 15
 Asp Glu Val Leu His Lys Ala Lys Ser Tyr Leu Ser Ala Asp Glu Tyr
 20 25 30
 Glu Tyr Val Leu Lys Ser Tyr His Ile Ala Tyr Glu Ala His Lys Gly
 35 40 45
 Gln Phe Arg Lys Asn Gly Leu Pro Tyr Ile Met His Pro Ile Gln Val
 50 55 60
 Ala Gly Ile Leu Thr Glu Met Arg Leu Asp Gly Pro Thr Ile Val Ala
 65 70 75 80
 Gly Phe Leu His Asp Val Ile Glu Asp Thr Pro Tyr Thr Phe Glu Asp
 85 90 95
 Val Lys Glu Met Phe Asn Glu Glu Val Ala Arg Ile Val Asp Gly Val
 100 105 110
 Thr Lys Leu Lys Lys Ile Lys Tyr Arg Ser Lys Glu Glu Gln Gln Ala
 115 120 125
 Glu Asn His Arg Lys Leu Phe Ile Ala Ile Ala Lys Asp Val Arg
 130 135 140

<210> 2335
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 2335
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 tctctgcaga tggaccacac agcattcccc tgtggctgct gcagggaggg ctgtgagaac
 120
 cccatgggccc gtgtggaatt taatcaggca agagttcaga cccatttcat ccacacactc
 180
 accgcctgc agttggaaca ggaggctgag agctttaggg agctggaggc ccctgcccag
 240
 ggagagccac ccagccctgg tgaggaggcc ctggtcccta ctttcccact ggccaagccc
 300
 cccatgaaca atgagctggg agacaacagc tgcagcagcg acatgactga ttcttccaca
 360
 gcattttcat cagcatcggg cactagt
 387

<210> 2336

<211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2336
 Met Asp His Thr Ala Phe Pro Cys Gly Cys Cys Arg Glu Gly Cys Glu
 1 5 10 15
 Asn Pro Met Gly Arg Val Glu Phe Asn Gln Ala Arg Val Gln Thr His
 20 25 30
 Phe Ile His Thr Leu Thr Arg Leu Gln Leu Glu Gln Glu Ala Glu Ser
 35 40 45
 Phe Arg Glu Leu Glu Ala Pro Ala Gln Gly Ser Pro Pro Ser Pro Gly
 50 55 60
 Glu Glu Ala Leu Val Pro Thr Phe Pro Leu Ala Lys Pro Pro Met Asn
 65 70 75 80
 Asn Glu Leu Gly Asp Asn Ser Cys Ser Ser Asp Met Thr Asp Ser Ser
 85 90 95
 Thr Ala Ser Ser Ser Ala Ser Gly Thr Ser
 100 105

<210> 2337
 <211> 359
 <212> DNA
 <213> Homo sapiens

<400> 2337
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 accatgtgca gctcaagaat gccctccggc ccacggcct cggggcaggg gaagggcagc
 120
 ttctctgcac cagcttcct gctgggctcc agggcccaca ggctgaggcc gggggcccag
 180
 gggtaaatgc caggcaccct gctattgagg aacctatcca ggaggaagga ctccgggcaga
 240
 cctgagggat cctcgtcctc ccacgggtcc tcatggcaga agcagaagga gctggagtcg
 300
 ctgaggtccg tgggcaggcg ggctggggcc aacgtggggt caccgacctc ctcaaagct
 359

<210> 2338
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 2338
 Met Cys Ser Ser Arg Met Ala Ser Gly Pro Ser Ala Ser Gly Gln Gly
 1 5 10 15
 Lys Gly Ser Phe Ser Ala Pro Ala Ser Leu Leu Gly Ser Arg Ala His
 20 25 30
 Arg Leu Arg Pro Gly Ala Gln Gly Ser Met Pro Gly Thr Leu Leu Leu
 35 40 45
 Arg Asn Leu Ser Arg Arg Lys Asp Ser Gly Arg Pro Ala Gly Ser Ser
 50 55 60
 Ser Ser His Gly Ser Ser Trp Gln Lys Gln Lys Glu Leu Glu Ser Leu


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<210> 2339
<211> 439
<212> DNA
<213> Homo sapiens
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<210> 2340
<211> 92
<212> PRT
<213> Homo sapiens
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<210> 2341
<211> 411
<212> DNA
<213> Homo sapiens
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1709

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 120
 ggagaaggaa gcagaggagg aggaggaaga ggaagagctg ctctgtgag cgggtcccca
 180
 ggagccaccg cacaggccca tgccccttca cctagcacca gcagcagcac cagcagccag
 240
 agtcctgggg ccaccggca caggcaggag gattctggag accaggccac atcaggcnat
 300
 ggaagtggag agcagtgtga aaccacctt gtcagtgcc tcagtcaccc caagtacagt
 360
 ggccccgggg gttcagaact atagccagga gtctgggggc actgagtggc n
 411

<210> 2342

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2342

Ala	Ser	Leu	Ala	Tyr	Ala	Ser	Ala	Gly	Gly	Ala	Arg	Gly	Gly	His	Gly
1				5				10					15		
Gly	Gly	Gly	Gly	Lys	Gly	Arg	Arg	Gly	Glu	Gly	Glu	Gly	Ser	Arg	Gly
			20					25					30		
Gly	Gly	Gly	Arg	Gly	Arg	Ala	Ala	Pro	Val	Ser	Gly	Ser	Pro	Gly	Ala
			35				40					45			
Thr	Ala	Gln	Ala	His	Ala	Pro	Ser	Pro	Ser	Thr	Ser	Ser	Ser	Thr	Ser
	50				55					60					
Ser	Gln	Ser	Pro	Gly	Ala	Thr	Arg	His	Arg	Gln	Glu	Asp	Ser	Gly	Asp
65				70					75					80	
Gln	Ala	Thr	Ser	Gly	Xaa	Gly	Ser	Gly	Glu	Gln	Cys	Glu	Thr	His	Leu
			85					90						95	
Val	Ser	Ala	Leu	Ser	His	Pro	Lys	Tyr	Ser	Gly	Pro	Gly	Gly	Ser	Glu
			100					105						110	

Leu

<210> 2343

<211> 522

<212> DNA

<213> Homo sapiens

<400> 2343

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 ggaggccagg gaccctacca agccatgtcc caggacatgg gcaataccca agacatgttc
 120
 agccctgata agagctcaat gcccatgagc aacgtgggca ccaccggct cagccacatg
 180
 cctctgcccc ctgcgtccaa tcctctggg accgtgcatt cagccccaaa ccgggggcta
 240
 ggcaggcggc cttcggacct caccatcagt attaatacaga tgggctcacc gggcatgggg
 300

cacttgaagt cgcccaccct tagccaggtg cactcaccctc tggtcacctc gccctctgcc
 360
 aacctcaagt caccacagac tccctcacag atggtgccct tgccttctgc caaccgcca
 420
 ggacctctca agtcgcccc a ggtcctcggc tcttccctca gtgtccgttc acccactggc
 480
 tcgcccagca ggctcaagtc tctttccatg gcgggtgcctt ct
 522

<210> 2344

<211> 174

<212> PRT

<213> Homo sapiens

<400> 2344

Gly	Pro	Gln	Lys	Met	Leu	Met	Pro	Ser	Gln	Phe	Pro	Asn	Gln	Gly	Gln
1				5					10					15	
Gln	Gly	Phe	Ser	Gly	Gly	Gln	Gly	Pro	Tyr	Gln	Ala	Met	Ser	Gln	Asp
			20					25					30		
Met	Gly	Asn	Thr	Gln	Asp	Met	Phe	Ser	Pro	Asp	Gln	Ser	Ser	Met	Pro
			35				40						45		
Met	Ser	Asn	Val	Gly	Thr	Thr	Arg	Leu	Ser	His	Met	Pro	Leu	Pro	Pro
			50				55				60				
Ala	Ser	Asn	Pro	Pro	Gly	Thr	Val	His	Ser	Ala	Pro	Asn	Arg	Gly	Leu
65					70					75				80	
Gly	Arg	Arg	Pro	Ser	Asp	Leu	Thr	Ile	Ser	Ile	Asn	Gln	Met	Gly	Ser
				85					90					95	
Pro	Gly	Met	Gly	His	Leu	Lys	Ser	Pro	Thr	Leu	Ser	Gln	Val	His	Ser
			100					105					110		
Pro	Leu	Val	Thr	Ser	Pro	Ser	Ala	Asn	Leu	Lys	Ser	Pro	Gln	Thr	Pro
			115				120					125			
Ser	Gln	Met	Val	Pro	Leu	Pro	Ser	Ala	Asn	Pro	Pro	Gly	Pro	Leu	Lys
			130				135					140			
Ser	Pro	Gln	Val	Leu	Gly	Ser	Ser	Leu	Ser	Val	Arg	Ser	Pro	Thr	Gly
145				150						155				160	
Ser	Pro	Ser	Arg	Leu	Lys	Ser	Pro	Ser	Met	Ala	Val	Pro	Ser		
				165						170					

<210> 2345

<211> 561

<212> DNA

<213> Homo sapiens

<400> 2345

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 ggctccacc agcccgctc caggcgcct gggctcgacg cgctggacag gcgcggcg
 120
 ctggcgctgc cgcccttttg ccgtttccgc cttttcttgc gcttctggtg cttgctggag
 180
 gcctgcgcgc ccgcctcgcc tgcgctgtcc gagtccttgg cgctgtcgga cgtgagtgc
 240
 tcgcagttct gcagccgcag gtccgactcg ctctccacca tagctattaa tgccaagaat
 300

gcaaataaaa agaataatcat ctgggtgaat taccttctta gcaatcctga gtacaaggac
 360
 acacccatgg acatcgacaca gctcccccat ctgccggaga aaacttccga atcctcggag
 420
 acatccgact ctgagtcaga ctctaaagac acctcaggtt ttacagagga caacgagaac
 480
 tccaagnntc cgacgagaag gggaaccagt ccgagaacag cgaagacccg gagcccgacc
 540
 ggaagaagtc gggcaacgcg t
 561

<210> 2346

<211> 187

<212> PRT

<213> Homo sapiens

<400> 2346

Xaa	Ile	Ser	Val	Leu	Ile	Leu	Ser	Thr	Glu	Ala	Leu	Gly	Gly	Glu	Asp
1				5					10					15	
Ser	Ser	Arg	Gly	Gly	Leu	His	Gln	Pro	Ala	Ser	Arg	Pro	Pro	Gly	Leu
			20					25						30	
Asp	Ala	Leu	Asp	Arg	Arg	Arg	Arg	Leu	Ala	Leu	Pro	Pro	Phe	Cys	Arg
		35					40					45			
Phe	Arg	Leu	Phe	Leu	Arg	Phe	Trp	Cys	Leu	Leu	Glu	Ala	Cys	Ala	Pro
	50					55				60					
Ala	Ser	Pro	Ala	Leu	Ser	Glu	Ser	Leu	Ala	Leu	Ser	Asp	Val	Ser	Asp
65				70					75					80	
Ser	Gln	Phe	Cys	Ser	Arg	Arg	Ser	Asp	Ser	Leu	Ser	Thr	Ile	Ala	Ile
			85					90					95		
Asn	Ala	Lys	Asn	Ala	Asn	Glu	Lys	Asn	Ile	Ile	Trp	Val	Asn	Tyr	Leu
			100					105					110		
Leu	Ser	Asn	Pro	Glu	Tyr	Lys	Asp	Thr	Pro	Met	Asp	Ile	Ala	Gln	Leu
		115					120					125			
Pro	His	Leu	Pro	Glu	Lys	Thr	Ser	Glu	Ser	Ser	Glu	Thr	Ser	Asp	Ser
	130					135					140				
Glu	Ser	Asp	Ser	Lys	Asp	Thr	Ser	Gly	Ile	Thr	Glu	Asp	Asn	Glu	Asn
145				150					155					160	
Ser	Lys	Xaa	Pro	Thr	Arg	Arg	Gly	Thr	Ser	Pro	Arg	Thr	Ala	Lys	Thr
			165					170						175	
Arg	Ser	Pro	Thr	Gly	Arg	Ser	Arg	Ala	Thr	Arg					
			180					185							

<210> 2347

<211> 375

<212> DNA

<213> Homo sapiens

<400> 2347

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 gagaacgtcg agtacgcctg cgccgcgccg gaagtactga aggggtgaata cagccgtaac
 120
 gtcgggtccga acatcgacgc ctgggtccgat ttccagccgc tgggcgtggg ggcgggggac
 180

acgccattca acttcccggc gatggtgccc ctgtggatgt atccgttggc gatcgtttgc
 240
 ggtaactgct ttatcctcaa gccgtccgag cgtgatccga gctcgacctt gctgatcgcc
 300
 cagctgttgc aggaagccgg tttgccccaa ggtgtgctga acgtggtgca tggtgacaag
 360
 accgcggtgg acgcg
 375

<210> 2348

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2348

Ile	Ser	Glu	Glu	His	Gly	Arg	Thr	Leu	Glu	Asp	Ala	Ala	Gly	Glu	Leu
1				5				10					15		
Lys	Arg	Gly	Ile	Glu	Asn	Val	Glu	Tyr	Ala	Cys	Ala	Ala	Pro	Glu	Val
			20				25					30			
Leu	Lys	Gly	Glu	Tyr	Ser	Arg	Asn	Val	Gly	Pro	Asn	Ile	Asp	Ala	Trp
		35				40					45				
Ser	Asp	Phe	Gln	Pro	Leu	Gly	Val	Val	Ala	Gly	Ile	Thr	Pro	Phe	Asn
	50				55					60					
Phe	Pro	Ala	Met	Val	Pro	Leu	Trp	Met	Tyr	Pro	Leu	Ala	Ile	Val	Cys
65				70					75					80	
Gly	Asn	Cys	Phe	Ile	Leu	Lys	Pro	Ser	Glu	Arg	Asp	Pro	Ser	Ser	Thr
			85				90						95		
Leu	Leu	Ile	Ala	Gln	Leu	Leu	Gln	Glu	Ala	Gly	Leu	Pro	Lys	Gly	Val
			100				105						110		
Leu	Asn	Val	Val	His	Gly	Asp	Lys	Thr	Ala	Val	Asp	Ala			
	115						120					125			

<210> 2349

<211> 417

<212> DNA

<213> Homo sapiens

<400> 2349

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 120
 gcacataatc atattaaatg gatttggaat acaaatgaac ttaatgcaag ttatgccgct
 180
 gacggatatg cacgtattaa tggcatcggt gcaatggtaa caacatttgg agtgggtgaa
 240
 ttaagtgtgt tcaacggaat cgctggatct tatgctgagc gtgtaccagt tattgccatc
 300
 actggggcac ctactcgagc tgtagaacia gaaggcaa at acgttcacca ttcccttggc
 360
 gaaggaactt ttgatgatta tagaaaaatg tttgagccta ttacaacagc gcaagct
 417

<210> 2350

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2350

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Xaa Lys Lys Lys Lys Lys Lys Lys Thr Gln Tyr Leu Met Asp Ala Val
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Tyr Ser Ala Gly Ala Asp Lys Val Phe Gly Val Pro Gly Asp Phe Asn
      20           25           30
Leu Ala Phe Leu Asp Asp Ile Ile Ala His Asn His Ile Lys Trp Ile
      35           40           45
Gly Asn Thr Asn Glu Leu Asn Ala Ser Tyr Ala Ala Asp Gly Tyr Ala
      50           55           60
Arg Ile Asn Gly Ile Gly Ala Met Val Thr Thr Phe Gly Val Gly Glu
      65           70           75           80
Leu Ser Ala Val Asn Gly Ile Ala Gly Ser Tyr Ala Glu Arg Val Pro
      85           90           95
Val Ile Ala Ile Thr Gly Ala Pro Thr Arg Ala Val Glu Gln Glu Gly
      100          105          110
Lys Tyr Val His His Ser Leu Gly Glu Gly Thr Phe Asp Asp Tyr Arg
      115          120          125
Lys Met Phe Glu Pro Ile Thr Thr Ala Gln Ala
      130          135

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<210> 2351

<211> 696

<212> DNA

<213> Homo sapiens

<400> 2351

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120
ggcaataactg tgctcgctca gccgaatgat gccggcatga ttcgtattga cgacaacctc
180
ggcatcgcgc tgtccttgga cgctaacgga cgccagacca cccttaaccc gtatcttggc
240
gcccagctgg ctctttgcga ggcttaccgg aatgtggctg tctctggcgc aactccggtg
300
gctgtcactg attgcctcaa ttatggctcc ccgtacgata ccgatgtcat gtggcaattc
360
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<210> 2352

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<212> PRT

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<400> 2352

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Asp Gln Tyr Asp Arg Phe Val Arg Gly Asn Thr Val Leu Ala Gln Pro
      35           40           45
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      50           55           60
Ser Leu Asp Ala Asn Gly Arg Gln Thr Thr Leu Asn Pro Tyr Leu Gly
      65           70           75           80
Ala Gln Leu Ala Leu Cys Glu Ala Tyr Arg Asn Val Ala Val Ser Gly
      85           90           95
Ala Thr Pro Val Ala Val Thr Asp Cys Leu Asn Tyr Gly Ser Pro Tyr
      100          105          110
Asp Pro Asp Val Met Trp Gln Phe Asp Glu Thr Ile Leu Gly Leu Val
      115          120          125
Asp Gly Cys Arg Glu Leu Gly Val Pro Val Thr Gly Gly Asn Val Ser
      130          135          140
Leu His Asn Arg Thr Gly Asp Glu Ser Ile Arg Pro Thr Pro Leu Val
      145          150          155          160
Gly Val Leu Gly Val Ile Asp Asp Val His Arg Arg Ile Pro Ser Ala
      165          170          175
Phe Ala His Asp Gly Asp Ala Val Leu Leu Leu Gly Thr Thr Lys Cys
      180          185          190
Glu Phe Gly Gly Ser Val Tyr Glu Asp Val Ile His Ala Gly His Leu
      195          200          205
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<210> 2353

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<212> DNA

<213> Homo sapiens

<400> 2353

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 <213> Homo sapiens

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 Glu Glu Asp Phe Glu Lys Val Ile Lys Ile Asn Leu Thr Gly Ala Phe
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<210> 2356

<211> 1000

<212> PRT

<213> Homo sapiens

<400> 2356

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          20          25          30
Leu Ser Asn Gln Asn Met Leu Leu Arg Gly Cys Val Leu Arg Asn Thr
          35          40          45
Glu Trp Cys Phe Gly Leu Val Ile Phe Ala Gly Pro Asp Thr Lys Leu
          50          55          60
Met Gln Asn Ser Gly Arg Thr Lys Phe Lys Arg Thr Ser Ile Asp Arg
65          70          75          80
Leu Met Asn Thr Leu Val Leu Trp Ile Phe Gly Phe Leu Val Cys Met
          85          90          95
Gly Val Ile Leu Ala Ile Gly Asn Ala Ile Trp Glu His Glu Val Gly
          100          105          110
Met Arg Phe Gln Val Tyr Leu Pro Trp Asp Glu Ala Val Asp Ser Ala
          115          120          125
Phe Phe Ser Gly Phe Leu Ser Phe Trp Ser Tyr Ile Ile Ile Leu Asn
130          135          140
Thr Val Val Pro Ile Ser Leu Tyr Val Ser Val Glu Val Ile Arg Leu
145          150          155          160
Gly His Ser Tyr Phe Ile Asn Trp Asp Lys Lys Met Phe Cys Met Lys
          165          170          175
Lys Arg Thr Pro Ala Glu Ala Arg Thr Thr Thr Leu Asn Glu Glu Leu
          180          185          190
Gly Gln Val Glu Tyr Ile Phe Ser Asp Lys Thr Gly Thr Leu Thr Gln
          195          200          205
Asn Ile Met Val Phe Asn Lys Cys Ser Ile Asn Gly His Ser Tyr Gly
210          215          220
Asp Val Phe Asp Val Leu Gly His Lys Ala Glu Leu Gly Glu Arg Pro
225          230          235          240
Glu Pro Val Asp Phe Ser Phe Asn Pro Leu Ala Asp Lys Lys Phe Leu
          245          250          255
Phe Trp Asp Pro Ser Leu Leu Glu Ala Val Lys Ile Gly Asp Pro His
260          265          270
Thr His Glu Phe Phe Arg Leu Leu Ser Leu Cys His Thr Val Met Ser
275          280          285
Glu Glu Lys Asn Glu Gly Glu Leu Tyr Tyr Lys Ala Gln Ser Pro Asp
290          295          300
Glu Gly Ala Leu Val Thr Ala Ala Arg Asn Phe Gly Phe Val Phe Arg
305          310          315          320
Ser Arg Thr Pro Lys Thr Ile Thr Val His Glu Met Gly Thr Ala Ile
          325          330          335
Thr Tyr Gln Leu Leu Ala Ile Leu Asp Phe Asn Asn Ile Arg Lys Arg
          340          345          350
Met Ser Val Ile Val Arg Asn Pro Glu Gly Lys Ile Arg Leu Tyr Cys
          355          360          365
Lys Gly Ala Asp Thr Ile Leu Leu Asp Arg Leu His His Ser Thr Gln
370          375          380
Glu Leu Leu Asn Thr Thr Met Asp His Leu Asn Glu Tyr Ala Gly Glu
385          390          395          400
Gly Leu Arg Thr Leu Val Leu Ala Tyr Lys Asp Leu Asp Glu Glu Tyr
          405          410          415
Tyr Glu Glu Trp Ala Glu Arg Arg Leu Gln Ala Ser Leu Ala Gln Asp

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420 425 430
 Ser Arg Glu Asp Arg Leu Ala Ser Ile Tyr Glu Glu Val Glu Asn Asn
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 450 455 460
 Val Pro Glu Thr Ile Ala Leu Leu Thr Leu Ala Asn Ile Lys Ile Trp
 465 470 475 480
 Val Leu Thr Gly Asp Lys Gln Glu Thr Ala Val Asn Ile Gly Tyr Ser
 485 490 495
 Cys Lys Met Leu Thr Asp Asp Met Thr Glu Val Phe Ile Val Thr Gly
 500 505 510
 His Thr Val Leu Glu Val Arg Glu Glu Xaa Gln Glu Ser Pro Gly Glu
 515 520 525
 Asp Asp Gly Leu Ile Xaa Arg Ser Val Gly Asn Gly Phe Thr Tyr Gln
 530 535 540
 Asp Lys Leu Ser Ser Ser Lys Leu Thr Ser Val Leu Glu Ala Val Ala
 545 550 555 560
 Gly Glu Tyr Ala Leu Val Ile Asn Gly His Ser Leu Ala His Ala Leu
 565 570 575
 Glu Ala Asp Met Glu Leu Glu Phe Leu Glu Thr Ala Cys Ala Cys Lys
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 Ala Val Ile Cys Cys Arg Val Thr Pro Leu Gln Lys Ala Gln Val Val
 595 600 605
 Glu Leu Val Lys Lys Tyr Lys Lys Ala Val Thr Leu Ala Ile Gly Asp
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 Gly Ala Asn Asp Val Ser Met Ile Lys Thr Ala His Ile Gly Val Gly
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 Ile Ser Gly Gln Glu Gly Ile Gln Ala Val Leu Ala Ser Asp Tyr Ser
 645 650 655
 Phe Ser Gln Phe Lys Phe Leu Gln Arg Leu Leu Leu Val His Gly Arg
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 675 680 685
 Asn Phe Ala Phe Thr Met Val His Phe Trp Phe Gly Phe Phe Cys Gly
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 725 730 735
 Asp Val Pro Glu Gln Arg Ser Met Glu Tyr Pro Lys Leu Tyr Glu Pro
 740 745 750
 Gly Gln Leu Asn Leu Leu Phe Asn Lys Arg Glu Phe Phe Ile Cys Ile
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 Val Phe Ala Asp Ala Thr Arg Asp Asp Gly Thr Gln Leu Ala Asp Tyr
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 Gln Ser Phe Ala Val Thr Val Ala Thr Ser Leu Val Ile Val Val Ser
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 Val Gln Ile Gly Leu Asp Thr Gly Tyr Trp Thr Ala Ile Asn His Phe
 820 825 830
 Phe Ile Trp Gly Ser Leu Ala Val Tyr Phe Ala Ile Leu Phe Ala Met
 835 840 845
 His Ser Asn Gly Leu Phe Asp Met Phe Pro Asn Gln Phe Arg Phe Val

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Val Leu Thr Thr Val Val Cys Ile Met Pro Val Val Ala Phe Arg Phe
      885              890              895
Leu Arg Leu Asn Leu Lys Pro Asp Leu Ser Asp Thr Val Arg Tyr Thr
      900              905              910
Gln Leu Val Arg Lys Lys Gln Lys Ala Gln His Arg Cys Met Arg Arg
      915              920              925
Val Gly Arg Thr Gly Ser Arg Arg Ser Gly Tyr Ala Phe Ser His Gln
      930              935              940
Glu Gly Phe Gly Glu Leu Ile Met Ser Gly Lys Asn Met Arg Leu Ser
945              950              955              960
Ser Leu Ala Leu Ser Ser Phe Thr Thr Arg Ser Ser Ser Ser Trp Ile
      965              970              975
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Gly Ala Asp Lys Pro Leu Lys Gly
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<210> 2357

<211> 408

<212> DNA

<213> Homo sapiens

<400> 2357

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<210> 2358

<211> 98

<212> PRT

<213> Homo sapiens

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Thr Val Trp Gly Ala Glu Pro Gln Asn Pro Leu Leu Pro Ala Asp Thr
      20          25          30
Asn Glu Thr Gly Gly Thr Lys Val Ile Thr Ala Leu Phe Ala Gly Leu
      35          40          45
Val Tyr Tyr Asp Ala Asp Gly Lys Thr His Asn Asp Val Ala Lys Ser

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      50              55              60
Ile Asp Phe Asp Gly Asp Arg Thr Tyr Thr Val Thr Leu Arg Lys Thr
65              70              75              80
Arg Phe Ala Asp Gly Thr Glu Val Lys Ala His Asn Phe Val Lys Ala
      85              90              95
Ala Ala

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<210> 2359
 <211> 324
 <212> DNA
 <213> Homo sapiens

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<400> 2359
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<210> 2360
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<400> 2360
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Gly Leu Val Ile Glu Phe Gln Gln Thr Asn His Glu Gly Gln Met Ile
      35      40      45
Glu Trp Ile His His Ala Arg Arg Arg Ile Ala Gly Ile Val Ile Asn
      50      55      60
Pro Gly Ala Trp Thr His Thr Ser Ala Ala Ile His Asp Ala Leu Ile
65      70      75      80
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Arg Glu Asp Phe Arg His Phe Ser Tyr Val Ser Arg
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<210> 2361
 <211> 398
 <212> DNA
 <213> Homo sapiens

<400> 2361

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<210> 2362

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2362

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 Arg Trp Trp Gly Trp Gly Leu Gln Leu Gly Pro Leu Ile Ser Leu
 35 40 45
 Lys Ala Gln Gln His Thr Val Ser Gln Val Cys Gln Val Pro Gln His
 50 55 60
 Gly His Pro Ala Leu Thr Ala Pro Pro Arg Leu Pro Ala Cys His His
 65 70 75 80
 Leu His Lys His Met Leu Gln Leu His Thr Arg Glu Thr Pro His Ala
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 Arg Phe

<210> 2363

<211> 833

<212> DNA

<213> Homo sapiens

<400> 2363

nngactcttc tagctcccaa cgcaaaagcg tttaaagatg cagctcagaa gcacaccag
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 cagcacaagg ggaggtccca agaaccagaa cttacatcac tgccctcgag ttcagaggtt
 120
 tcctttccca cttctcaga actttctgtt tccatggcct cctctgccac ctctgccacc
 180
 tccctgatg tgctggcctc cgtttccatc gcttctcat ggcgttcttc cgccgggtgt
 240
 tccaagccca ctgcangtcg aagcaaactg gattgcgtta ccactcagaa ggtggcacag
 300
 ggactggcag cggtgccatc tgggagtctg tgtgctcagc ctccgagtgc aggttcccc
 360

ggccctgct gtggtgctag gtccccagat gagagatcac ggcatgaag atcagcccc
 420
 aaggcagccc cttccttcc agcctgggct ctggcggtgt ctaggtgctc acttccatgg
 480
 ctggcctgct cacagagccc tacctcagcc tgtggtaagc gcacctgctc ggccctgggtg
 540
 ctctatgatg agccaccagt cagttctgca gatgtgtccc cgagctcctg ccgagggacg
 600
 aaacacgggtg gccctgctcc tagtgctgtg gcacgccacg ctccacacct gccatctgcc
 660
 cttccaccac ctgctcccc aggggctccg cctcgtgact cacgctcagg caagtctccg
 720
 ggcgcaaca gctggctgat ggtgacatgc tgcagcctgg tcacatcaga aaccatgagg
 780
 gtggatctcc ggaggtcatc gatgtggaca gactgccaca gcccttcacg cgt
 833

<210> 2364

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2364

Xaa	Thr	Pro	Leu	Ala	Pro	Asn	Ala	Lys	Ala	Phe	Lys	Asp	Ala	Ala	Gln
1				5					10					15	
Lys	His	His	Gln	Gln	His	Lys	Gly	Arg	Ser	Gln	Glu	Pro	Glu	Leu	Thr
			20					25					30		
Ser	Leu	Pro	Pro	Ser	Ser	Glu	Val	Ser	Phe	Pro	Thr	Phe	Ser	Glu	Leu
		35					40					45			
Ser	Val	Ser	Met	Ala	Ser	Ser	Ala	Thr	Ser	Ala	Thr	Ser	Pro	Asp	Val
	50					55					60				
Leu	Ala	Ser	Val	Ser	Ile	Ala	Ser	Ser	Trp	Arg	Ser	Ser	Ala	Arg	Cys
65					70				75					80	
Ser	Lys	Pro	Thr	Ala	Xaa	Arg	Ser	Lys	Arg	Asp	Cys	Val	Thr	Thr	Gln
				85					90					95	
Lys	Val	Ala	Gln	Gly	Leu	Ala	Ala	Val	Pro	Ser	Gly	Ser	Leu	Cys	Ala
			100					105					110		
Gln	Pro	Pro	Ser	Ala	Gly	Phe	Pro	Gly	Pro	Cys	Cys	Gly	Ala	Arg	Ser
		115					120						125		
Pro	Asp	Glu	Arg	Ser	Arg	Ser									
	130					135									

<210> 2365

<211> 429

<212> DNA

<213> Homo sapiens

<400> 2365

accggtgccc agctcccacg gctcgtccag acctacgttg agaaacttcg acgagacagt
 60
 ctccgtcagt tcgccaaca acctctgaac gaagtcaaga ttctccggca ctggagccaa
 120
 ggtgcttgcc ctggcatgaa cgccccaggg gaggtcgacg ccgtcgggat tctcacaccg
 180

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<210> 2366
<211> 132
<212> PRT
<213> Homo sapiens
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<210> 2367
<211> 474
<212> DNA
<213> Homo sapiens
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1726

tcgggggtatc aggggatccg cgacatcatc gacgccgtgg ccccgatcgg cgcacgggtt
 420
 gcgacggcag cttcgtcgac atggacatgc tcgtcgtcgg tgtcggcaac gcgt
 474

<210> 2368
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 2368
 Xaa Ala Arg Glu Lys Thr Cys Ala Gln Phe Gly Gly Thr Tyr Pro Gly
 1 5 10 15
 Ser Ala Gly Ser Gly Gly His Glu Leu Thr Asp Ala Arg Ala Phe Ala
 20 25 30
 Ser Trp Gly Val Asp Phe Val Lys Tyr Asp Arg Cys Ser Gly Asp Ser
 35 40 45
 Ala His Asp Asp Gln Val Ala Ser Phe Thr Ala Met Arg Asp Ala Ile
 50 55 60
 Arg Ser Thr Gly Arg Pro Met Val Tyr Ser Ile Asn Pro Asn Ser Glu
 65 70 75 80
 Ser Pro Asp Arg Ser Gly Ala Gln Phe Asp Trp Gly Gly Val Ala Thr
 85 90 95
 Met Thr Arg Thr Thr Asn Asp Ile Ser Pro Val Trp Thr Thr Arg Pro
 100 105 110
 Ala Gly Ala Asp Ala Thr Pro Ala Ser Gly Tyr Gln Gly Ile Arg Asp
 115 120 125
 Ile Ile Asp Ala Val Ala Pro Ile Gly Ala Arg Val Ala Thr Ala Ala
 130 135 140
 Ser Ser Thr Trp Thr Cys Ser Ser Ser Val Ser Ala Thr Arg
 145 150 155

<210> 2369
 <211> 408
 <212> DNA
 <213> Homo sapiens

<400> 2369
 ctgaatggca ggcaggcaga ggccaccaga gccagccccc cgagaagccc tgctgagcca
 60
 aagggggagcg ccttgggacc taaccagag ccccatctca ctttcccccg ttctttcaaa
 120
 gtgcctcccc caacccagc caggacttcg tccatccag ttcaggaagc acaagaggct
 180
 cccgaaagga agagggggcc accaagaagg ctcccagccg actcccactg cctcccagct
 240
 tccacatccg ccccgctcc caggtctacc cagacagggc ccccgagcnc agactgcct
 300
 ggggagctca aggccacagc accagccagc ccaaggcttg gccagtccca gtcccaagca
 360
 gatgaacgag ctgggactcc gcctccagcc cctcccctgc cccctcct
 408

<210> 2370

<211> 136
 <212> PRT
 <213> Homo sapiens

<400> 2370
 Leu Asn Gly Arg Gln Ala Glu Ala Thr Arg Ala Ser Pro Pro Arg Ser
 1 5 10 15
 Pro Ala Glu Pro Lys Gly Ser Ala Leu Gly Pro Asn Pro Glu Pro His
 20 25 30
 Leu Thr Phe Pro Arg Ser Phe Lys Val Pro Pro Pro Thr Pro Val Arg
 35 40 45
 Thr Ser Ser Ile Pro Val Gln Glu Ala Gln Glu Ala Pro Glu Arg Lys
 50 55 60
 Arg Gly Pro Pro Arg Arg Leu Pro Ala Asp Ser His Cys Leu Pro Ala
 65 70 75 80
 Ser Thr Ser Ala Pro Pro Pro Arg Ser Thr Gln Thr Gly Pro Pro Ser
 85 90 95
 Xaa Asp Cys Pro Gly Glu Leu Lys Ala Thr Ala Pro Ala Ser Pro Arg
 100 105 110
 Leu Gly Gln Ser Gln Ser Gln Ala Asp Glu Arg Ala Gly Thr Pro Pro
 115 120 125
 Pro Ala Pro Pro Leu Pro Pro Pro
 130 135

<210> 2371
 <211> 327
 <212> DNA
 <213> Homo sapiens

<400> 2371
 gaattcgggtg tgcgatgcga gcttcgagcc tgggagcaga gacaaggagc aaaggcgggtg
 60
 agagggttgc cagggcaccc agttacagct ggagctgcag gggacccatc cctcgagaga
 120
 ggcaggcact agtcatgagg caagagatgc ctcagaagag gatgctggcc gcagggcaca
 180
 gcagagaggg agatagcccg gggcactcct caggaccggg cctcagggga cagcaaaca
 240
 gattcctgat agacgcgccc aggtcatgcc ttttcagtgg tgtgagccag gttctggcgt
 300
 caggcggggcc aaggttttca tgcagcn
 327

<210> 2372
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 2372
 Met Arg Ala Cys Ser Leu Gly Ala Glu Thr Arg Ser Lys Gly Gly Glu
 1 5 10 15
 Arg Val Ala Arg Ala Pro Ser Tyr Ser Trp Ser Cys Arg Gly Pro Ile
 20 25 30
 Pro Arg Glu Arg Gln Ala Leu Val Met Arg Gln Glu Met Pro Gln Lys

35 40 45
 Arg Met Leu Ala Ala Gly His Ser Arg Glu Gly Asp Ser Pro Gly His
 50 55 60
 Ser Ser Gly Pro Gly Leu Arg Gly Gln Gln Thr Arg Phe Leu Ile Asp
 65 70 75 80
 Ala Pro Arg Ser Cys Leu Phe Ser Gly Val Ser Gln Val Leu Ala Ser
 85 90 95
 Gly Gly Pro Arg Phe Ser Cys Ser
 100

<210> 2373

<211> 591

<212> DNA

<213> Homo sapiens

<400> 2373

gaattctgac attcaggaag tcaattgcag aaggtttaac caagttgatt ctgttttacc
 60
 aaatcctgtc tattctgaaa agcggccaat gccagactca tctcatgatg tgaaagttct
 120
 cacttcaaag acatcagctg ttgagatgac ccaggcagta ttgaatactc agcttttcac
 180
 agaaaatggt accaaagttg agcaaaattc accagcagtt tgtgaaacaa tttctgttcc
 240
 caagtccatg tccactgagg aatataaatc aaaaattcaa aatgaaaata tgctacttct
 300
 cgctttgctt tcacaggcac gtaagactca gaagacagta ttaaaagatg ctaatcaaac
 360
 tattcaggat tctaaaccag acagtttgta aatgaatcca aatacccaaa tgactggtaa
 420
 ccaactgaat ttgaagaaca tggaaactcc aagtacttct aatgtaagtgcaggggtttt
 480
 ggacaactcc ttttgcatg gacaagaatc ctcaacaaaa ggaatgcctg ctaaaagtga
 540
 cagtactgt tccatggaag tgctagcaac ctgtctttcc ctgtggaaaa a
 591

<210> 2374

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2374

Met Pro Asp Ser Ser His Asp Val Lys Val Leu Thr Ser Lys Thr Ser
 1 5 10 15
 Ala Val Glu Met Thr Gln Ala Val Leu Asn Thr Gln Leu Ser Ser Glu
 20 25 30
 Asn Val Thr Lys Val Glu Gln Asn Ser Pro Ala Val Cys Glu Thr Ile
 35 40 45
 Ser Val Pro Lys Ser Met Ser Thr Glu Glu Tyr Lys Ser Lys Ile Gln
 50 55 60
 Asn Glu Asn Met Leu Leu Ala Leu Leu Ser Gln Ala Arg Lys Thr
 65 70 75 80
 Gln Lys Thr Val Leu Lys Asp Ala Asn Gln Thr Ile Gln Asp Ser Lys

```

<400> 2376
Xaa Ala Met Ser Leu Leu Ser Ser Gly Thr Leu Asp Ser Tyr Leu Glu
 1              5              10              15
Arg His Lys Gln Leu Asp Ala Met Arg Met Leu His Phe Phe Ala Leu
      20              25              30
Asp Glu Glu Asn Pro Ala Ser Ile Tyr Asn Cys Leu Arg Ala Ala Arg
      35              40              45
Gly Asn Ala His Ala Val Arg Gly Arg Ile Thr Ala Asp Met Trp Glu
      50              55              60
Asn Leu Asn Ala Thr Trp Leu Glu Met Arg Ser Ile Ala Ala Gly Gly
65              70              75              80
Leu Ala Arg His Gly Ile Ser His Phe Cys Asp Trp Val Lys Gln Arg

```

85 90 95
 Ser His Leu Phe Arg Gly Ala Thr Ser Gly Thr Ile Met Arg Asn Asp
 100 105 110
 Ala Tyr Arg Phe Ile Arg Leu Gly Thr Phe Val Glu Arg Ala Asp Asn
 115 120 125
 Thr Leu Arg Leu Leu Asp Ala Arg Tyr Glu Met Phe Gly Glu Glu Ser
 130 135 140
 Glu Glu Val Ser Asp Leu Ser Ala Arg Gly Tyr Tyr Gln Trp Ser Ala
 145 150 155 160
 Leu Leu Arg Ala Leu Ser Ser Phe Glu Ala Tyr Thr Glu Leu Tyr Pro
 165 170 175
 Asn Ala

<210> 2377
 <211> 622
 <212> DNA
 <213> Homo sapiens

<400> 2377
 acgcgtgaag ggttgaggct tcagaagtgg tagggaagaa cagaagctcc cttctgaggg
 60
 agcaccagg agatgaaagg aaccaatcct gggtaggcct gcaccaggct tatcaacccc
 120
 tgacagacaa atggaaaact tctgtgatgg tgggacatga aaaaatattt cacccttctg
 180
 ataaaatgga accagcagat agaagtagga atttttctgt taggtgaaat gtttttaaaa
 240
 atatgtatac aggaaaaagc ataaaacagt attgactggc aaacatagaa ctggaatgta
 300
 aatataatgt tctttgcctt gaatgattta agtggcatga taaaactcat gccacagact
 360
 gggtaagaca aggaatctaa tccactctaa aaagaagaaa agcatagtaa aattctcctt
 420
 agagttagaa ttattaatag ttcttatcta ctatttaatt taatcatagt taatgatgag
 480
 aatttcttaa atttaaagct tctgatgatg ctaaagtgc atttctcatg attccttaaa
 540
 acaatttttg taaattctat tcctaggacc ttctgctttc agaaaaatta atgtcttgta
 600
 ttcttcgtat tggaggagat ct
 622

<210> 2378
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 2378
 Met Ser Phe Ile Met Pro Leu Lys Ser Phe Arg Ala Lys Asn Ile Ile
 1 5 10 15
 Phe Thr Phe Gln Phe Tyr Val Cys Gln Ser Ile Leu Phe Tyr Ala Phe
 20 25 30
 Ser Cys Ile His Ile Phe Lys Asn Ile Ser Pro Asn Arg Lys Ile Pro

```

          35          40          45
Thr Ser Ile Cys Trp Phe His Phe Ile Arg Arg Val Lys Tyr Phe Phe
    50          55          60
Met Ser His His His Arg Ser Phe Pro Phe Val Cys Gln Gly Leu Ile
65          70          75          80
Ser Leu Val Gln Asp His Pro Gly Leu Val Pro Phe Ile Ser Trp Val
          85          90          95
Leu Pro Gln Lys Gly Ala Ser Val Leu Pro Tyr His Phe
          100          105

```

<210> 2379

<211> 342

<212> DNA

<213> Homo sapiens

<400> 2379

```

tcatgacctg gagacttcgg aaactcaaca agactgcagg gcacccaggg gcaccagccc
60
cggtcaccgc agaggatcag tgcactttgc catctggcag atcaactcat ggcacaactg
120
ggaaacataa cattcacgct tgtgaaccga gacgccatac cccagcgggtg ccgagagcaa
180
cagtgtctgtg caggtctggg cagatgaggg cctccaggac acgaggactc actcgctcac
240
cctgcccact gggcagctgc tcgccactcc cctcctggag ggcaggacgg acaccacaca
300
cacacacaag caggaagct gtgcagcagt ggggagaaag ca
342

```

<210> 2380

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2380

```

Met Thr Trp Arg Leu Arg Lys Leu Asn Lys Thr Ala Gly His Pro Gly
  1          5          10          15
Ala Pro Ala Pro Val Thr Ala Glu Asp Gln Cys Thr Leu Pro Ser Gly
          20          25          30
Arg Ser Thr His Gly Thr Thr Gly Lys His Asn Ile His Ala Cys Glu
          35          40          45
Pro Arg Arg His Thr Pro Ala Val Pro Arg Ala Thr Val Leu Cys Arg
          50          55          60
Ser Gly Gln Met Arg Ala Ser Arg Thr Arg Gly Leu Thr Arg Ser Pro
65          70          75          80
Cys Pro Leu Gly Ser Cys Ser Pro Leu Pro Ser Trp Arg Ala Gly Arg
          85          90          95
Thr Pro His Thr His Thr Ser Arg Glu Ala Val Gln Gln Trp Gly Glu
          100          105          110
Ser

```

<210> 2381

<211> 434

<212> DNA

<213> Homo sapiens

<400> 2381

gtgcaccctg gccatatgga cgccagcgac gtcggcgctct tgcgtgacgt ggaaccgac
60
ggcccaagta gagagatgga ttttgaatgg tgacgatgta cccgccgcag caagtggatg
120
ccgtcctctt tgacatggac ggaaccctgc tcaacaccct gccggcctgg tgcgtggcat
180
ctgagcatct gtggggcact tctctggctg acgctgacag cgccaagggt gacgggggca
240
ccgtcgacga cgtcgttgag ctgtatctgc gagaccaccc tcaggcagat ccccaggcca
300
ccatcgagcg tttcatggac atccttgacg ccaacctggc tggccacacc gagccgatgc
360
ccggagctga ccgcctcgtg aagaggctgt caggatcatgt acccatcgct gtggtgtcga
420
attccccgac gcgt
434

<210> 2382

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2382

Met	Val	Thr	Met	Tyr	Pro	Pro	Gln	Gln	Val	Asp	Ala	Val	Leu	Phe	Asp
1				5					10					15	
Met	Asp	Gly	Thr	Leu	Leu	Asn	Thr	Leu	Pro	Ala	Trp	Cys	Val	Ala	Ser
			20					25					30		
Glu	His	Leu	Trp	Gly	Thr	Ser	Leu	Ala	Asp	Ala	Asp	Ser	Ala	Lys	Val
		35					40					45			
Asp	Gly	Gly	Thr	Val	Asp	Asp	Val	Val	Glu	Leu	Tyr	Leu	Arg	Asp	His
		50				55					60				
Pro	Gln	Ala	Asp	Pro	Gln	Ala	Thr	Ile	Glu	Arg	Phe	Met	Asp	Ile	Leu
65					70				75					80	
Asp	Ala	Asn	Leu	Ala	Gly	His	Thr	Glu	Pro	Met	Pro	Gly	Ala	Asp	Arg
			85						90					95	
Leu	Val	Lys	Arg	Leu	Ser	Gly	His	Val	Pro	Ile	Ala	Val	Val	Ser	Asn
		100						105					110		
Ser	Pro	Thr	Arg												
			115												

<210> 2383

<211> 393

<212> DNA

<213> Homo sapiens

<400> 2383

acgcgtgcgt tcagatgagc gccggacgaa actcctcggc cgcttcggca ggcatggatt
60
catgtcggca cgggcctttg aacaggatcg ccgtcgcgtg gctatccgcc gcgggtgggg
120

cagaaaacgc ccactctccc ttccccaggc gccggccgtc gagtcgtcta cgcaacgcac
 180
 gtctacatag gtgacttttt cataccccca ctttcgtact cggatgggct cggcgtgctc
 240
 gatgtcggca cgaaaaatta aatgcactga atgcgggttg tcgcacagga tgcattctgt
 300
 ctttcttgat gccaccacc ttgttacata ttctgccatg caaaacacct tgtgattttt
 360
 ggcggagtgc aacatggtat gtgtatgcc a ctg
 393

<210> 2384

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2384

Met	Leu	His	Ser	Ala	Lys	Asn	His	Lys	Val	Phe	Cys	Met	Ala	Glu	Tyr
1				5					10					15	
Val	Thr	Arg	Trp	Val	Ala	Ser	Arg	Lys	Thr	Arg	Cys	Ile	Leu	Cys	Asp
			20					25					30		
Asn	Pro	His	Ser	Val	His	Leu	Ile	Phe	Arg	Ala	Asp	Ile	Glu	His	Ala
			35				40					45			
Glu	Pro	Ile	Arg	Val	Arg	Lys	Trp	Gly	Tyr	Glu	Lys	Val	Thr	Tyr	Val
		50				55				60					
Asp	Val	Arg	Cys	Val	Asp	Asp	Ser	Thr	Ala	Gly	Ala	Trp	Gly	Arg	Glu
65					70					75				80	
Ser	Gly	Arg	Phe	Leu	Pro	His	Pro	Arg	Arg	Ile	Ala	Thr	Arg	Arg	Arg
			85					90					95		
Ser	Cys	Ser	Lys	Ala	Arg	Ala	Asp	Met	Asn	Pro	Cys	Leu	Pro	Lys	Arg
			100					105					110		
Pro	Arg	Ser	Phe	Val	Arg	Arg	Ser	Ser	Glu	Arg	Thr	Arg			
			115					120				125			

<210> 2385

<211> 347

<212> DNA

<213> Homo sapiens

<400> 2385

acgcgttccc aaagtaggat ggctgggata gagggaaagg acatctttca ggcttggtat
 60
 gcactgtgct gtggactctt gttgtggggt cctaggtctg cccagcattt tggggttcac
 120
 cccgtgaccc tctacgggtt tccatgcccc cagcaccacg tccatcatca tttctgggggt
 180
 ccctcacct cagagagcct gtttcctatg actgcgtggg ccagctggag aaggacgacc
 240
 caagaccct caagtttctg tgtcctgacc ccaagcatag gcctgagtgc tcttggggcc
 300
 caagggcctt tacgcactac tctctggggc ccactgtctg cactctt
 347

<210> 2386

<211> 109
 <212> PRT
 <213> Homo sapiens

<400> 2386
 Met Ala Gly Ile Glu Gly Lys Asp Ile Phe Gln Ala Cys Tyr Ala Leu
 1 5 10 15
 Cys Cys Gly Leu Leu Leu Trp Gly Pro Arg Ser Ala Gln His Phe Gly
 20 25 30
 Val His Pro Val Thr Leu Tyr Gly Phe Pro Cys Pro Gln His His Val
 35 40 45
 His His His Phe Trp Gly Pro Leu Thr Ser Glu Ser Leu Leu Pro Met
 50 55 60
 Thr Ala Trp Ala Ser Trp Arg Arg Thr Thr Gln Asp Pro Ser Ser Phe
 65 70 75 80
 Cys Val Leu Thr Pro Ser Ile Gly Leu Ser Ala Pro Gly Ala Gln Gly
 85 90 95
 Pro Leu Arg Thr Thr Leu Trp Gly Pro Leu Ser Ala Leu
 100 105

<210> 2387
 <211> 715
 <212> DNA
 <213> Homo sapiens

<400> 2387
 ncggccgcac ttcaccttac ggaggggaga taatgagatc aattagaggc gccgtcaccg
 60
 cgccggagac agctgccgcc gcatagtaat caccgcggg ctgggtgcgc gggggctccc
 120
 cgctacctgc gcgcctgctg ctcccaccac gcggcaccga cccgggcgcg cccccggccc
 180
 ctgtccgcag cccacagcca caccgcgcac cctacaccct ccttgcgct ctgctgggga
 240
 gctcaccocc tccactcgca cagtgcgctg cggcccgggg tgtgggaggt cccgggactt
 300
 ggggtgtgag tgctgtgtg ggggtagggg caggtgtccg cttgtgcgca tatgggcatg
 360
 agtgtacatg gcgtgtgctt ggagatgggc gagtgcaggc tggaatgtgc cggcgtggca
 420
 cgtgtgtggg cccaaataga tgcgtgtgtg atcacatgtt gtgttcgtgt ttgcacctcg
 480
 tgtgcctgtg tgtccgtatt tgagtgccta caggaatgtg ggtgggtgagt acccgatatg
 540
 ggggtgatct gcaacttgtc gtgtgtgtgt gtaggcgcgt gtgtgtgcgt gtgtgtgtta
 600
 ngggatacgt gtagatgtgc attagtgtga ctgtgtgtgc tcatgtgcct gtgcacgtgt
 660
 gtttgagggt tgtgtgcatg ggtagcgtct gtgagagcca tgtgtatatc tgcag
 715

<210> 2388
 <211> 58
 <212> PRT

<213> Homo sapiens

<400> 2388

```

Met Gly Met Ser Val His Gly Val Cys Leu Glu Met Gly Glu Cys Arg
 1           5           10          15
Leu Glu Cys Ala Gly Val Ala Arg Val Trp Ala Gln Ile Asp Ala Cys
      20           25           30
Val Ile Thr Cys Cys Val Arg Val Cys Thr Ser Cys Ala Cys Val Ser
      35           40           45
Val Phe Glu Cys Leu Gln Glu Cys Gly Trp
      50           55

```

<210> 2389

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2389

```

ntcaccctgc cgccggaagg ttgctcgtac cgcattggcca tcgtcaccat gaagaagtcg
60
tatccggggcc acgccaagcg cgtcatgttg ggtgtctggt cgtttttgcg acagttcatg
120
tataccaagt tcgttatcgt caccgacgac gatatacaacg cccgcgactg gaacgacgtg
180
atctggggcca tcaccacgcg catggacccc aagcgcgaca cggatgatgat cgataacacg
240
ccgatcgact acctcgactt cgctcgccg gtgtccggcc tgggttcgaa gatgggggtc
300
gatccacgcg acaaattggc cggccacacc acccgn
336

```

<210> 2390

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2390

```

Xaa Thr Leu Pro Pro Glu Gly Cys Ser Tyr Arg Met Ala Ile Val Thr
 1           5           10          15
Met Lys Lys Ser Tyr Pro Gly His Ala Lys Arg Val Met Leu Gly Val
      20           25           30
Trp Ser Phe Leu Arg Gln Phe Met Tyr Thr Lys Phe Val Ile Val Thr
      35           40           45
Asp Asp Asp Ile Asn Ala Arg Asp Trp Asn Asp Val Ile Trp Ala Ile
      50           55           60
Thr Thr Arg Met Asp Pro Lys Arg Asp Thr Val Met Ile Asp Asn Thr
      65           70           75           80
Pro Ile Asp Tyr Leu Asp Phe Ala Ser Pro Val Ser Gly Leu Gly Ser
      85           90           95
Lys Met Gly Leu Asp Pro Thr His Lys Trp Pro Gly His Thr Thr Arg
      100          105          110

```

<210> 2391

<211> 388

<212> DNA

<213> Homo sapiens

<400> 2391

gtcgactaac ctgctacag cgcaccacct acgttttagtc gcgaagcgtg tcggctccat
 60
 gttcattccg gagctacacc atgaataaag tactacctga tcaccccatc gatcccgcaa
 120
 aagaccgcgt cgctttcaac cgcgccatcg accattacct gcctaccag ggcttccact
 180
 gcgtcaacga agacctgagt ttcgaagacg ccctgctcta caccgccagc ctgctcgaca
 240
 gtgcctctgc cacggcgctg gattgcggtg agctgctgca aagccctgaa cgggcgaaga
 300
 tcctggccgt gtggcatttg ctggaaattg caaaaaccac cgtagatcgc ttccccatcg
 360
 agtgccctgac cgcaccaaag ccctgcct
 388

<210> 2392

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2392

Met	Asn	Lys	Val	Leu	Pro	Asp	Pro	Pro	Ile	Asp	Pro	Ala	Lys	Asp	Arg
1				5					10					15	
Val	Ala	Phe	Asn	Arg	Ala	Ile	Asp	His	Tyr	Leu	Pro	Thr	Gln	Gly	Phe
			20					25					30		
His	Cys	Val	Asn	Glu	Asp	Leu	Ser	Phe	Glu	Asp	Ala	Leu	Leu	Tyr	Thr
		35					40					45			
Ala	Ser	Leu	Leu	Asp	Ser	Ala	Ser	Ala	Thr	Ala	Leu	Asp	Cys	Gly	Glu
	50					55					60				
Leu	Leu	Gln	Ser	Pro	Glu	Arg	Ala	Lys	Ile	Leu	Ala	Val	Trp	His	Leu
65					70					75				80	
Leu	Glu	Ile	Ala	Lys	Thr	Thr	Val	Asp	Arg	Phe	Pro	Ile	Glu	Cys	Leu
				85					90					95	
Thr	Ala	Pro	Lys	Pro	Cys										
				100											

<210> 2393

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2393

aacctgtcta ccgaggacca ggccgagcag gtagagattg tgaagcgtc tgagtccggc
 60
 atggtcaccg accccatcac tgcgcgcccg gatatgacca tcggggaagt agacgcgctg
 120
 tgcgcccgct tccgcatctc cggcctgccg gtggtagacg aggacggcac cctgatgggc
 180
 atttgacca cccgcgatat gcgcttcgag cctgactttg accgcaaggc cagcgaggtc
 240

atgacggcta tgccgcttgt tgttgcgcg gaggggtgtat ctaagaagga agccctcgaa
 300
 ctgctctcgg ccaataaggt ggaaaagctg cccatcgctg atgcgataa taagctcacc
 360
 ggcttgatta ccgtcaagga ctttgtcaag accgagcagt accccaacgc g
 411

<210> 2394

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2394

Asn	Leu	Ser	Thr	Glu	Asp	Gln	Ala	Glu	Gln	Val	Glu	Ile	Val	Lys	Arg
1				5				10						15	
Ser	Glu	Ser	Gly	Met	Val	Thr	Asp	Pro	Ile	Thr	Ala	Arg	Pro	Asp	Met
			20					25					30		
Thr	Ile	Gly	Glu	Val	Asp	Ala	Leu	Cys	Ala	Arg	Phe	Arg	Ile	Ser	Gly
		35					40					45			
Leu	Pro	Val	Val	Asp	Glu	Asp	Gly	Thr	Leu	Met	Gly	Ile	Cys	Thr	Thr
	50					55					60				
Arg	Asp	Met	Arg	Phe	Glu	Pro	Asp	Phe	Asp	Arg	Lys	Val	Ser	Glu	Val
65					70				75					80	
Met	Thr	Ala	Met	Pro	Leu	Val	Val	Ala	Arg	Glu	Gly	Val	Ser	Lys	Lys
			85					90						95	
Glu	Ala	Leu	Glu	Leu	Leu	Ser	Ala	Asn	Lys	Val	Glu	Lys	Leu	Pro	Ile
		100						105					110		
Val	Asp	Ala	Asp	Asn	Lys	Leu	Thr	Gly	Leu	Ile	Thr	Val	Lys	Asp	Phe
	115						120					125			
Val	Lys	Thr	Glu	Gln	Tyr	Pro	Asn	Ala							
	130						135								

<210> 2395

<211> 362

<212> DNA

<213> Homo sapiens

<400> 2395

aagctttcag aggagtttgc taaagtgtta aggatttgca tattttcaac ttagtcata
 60
 tctaagtgcc ccaataaaac agcgcgggcg attgggggct ggctttcatc aacaactaac
 120
 ttagcaatat taatctgacc ttttctggt gattgggcat ttagtaataa tgcggggcca
 180
 atatcatcat actttccaaa tatttttgat ttttagaca tcaactgaag ttgtgaccat
 240
 ttactgtctt tgtcttgatg gcaatctaaa caaacatctc ttgtattaag ttgttcactt
 300
 acccaaggat taggcactct aaaggcatga tcgcgtcgat catcgactcc catgtaacgc
 360
 gt
 362

<210> 2396

<400> 2398
Cys Thr Thr Gly Pro Ser Pro Ser Leu Pro Thr Gly Thr Thr Leu Pro
1 5 10 15
Thr Pro Trp Lys Gly Thr Ser Thr Thr Leu Ser Pro Ser Ser Lys Ser

```

      20      25      30
Gln Thr Ser Lys Thr Lys Ala Arg Glu Thr Arg Thr Leu Thr Trp Val
      35      40      45
Thr Ile Pro His Ala Gly Ile Val Ile Ser Asp Thr His Leu Asp Thr
      50      55      60
Pro Arg Ser Ile Asn Thr Thr Ser Thr Ile Gly Met
      65      70      75

```

<210> 2399

<211> 344

<212> DNA

<213> Homo sapiens

<400> 2399

```

acgcgtcatg cttcacgaaa cgggtcacgc gcttcattac caagcagctg gcaaacacaa
60
cttgattttc gagcgggttg cgccagtcga gatcatggag ttcgtggcct actgcttgca
120
gtttctgacg atcgagcgcc tggccatgtc aggggaactt tcgggtaaag aacaggaact
180
agtcaaaccc tttgctggtc cgccagggtt tggagggggt cgaaaaccta caacgccaca
240
aaacggttcc agcactgggt ttataaacag cctaaaatcc cgacaagtaa agaactcgat
300
accgtatggc ttgagatgag acacacgctc ggggtggatt ggtc
344

```

<210> 2400

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2400

```

Met Leu His Glu Thr Gly His Ala Leu His Tyr Gln Ala Ala Gly Lys
1      5      10      15
His Asn Leu Tyr Phe Glu Arg Val Ala Pro Val Glu Ile Met Glu Phe
20      25      30
Val Ala Tyr Cys Leu Gln Phe Leu Thr Ile Glu Arg Leu Ala Met Ser
35      40      45
Gly Glu Leu Ser Gly Lys Glu Gln Glu Leu Val Lys Pro Phe Ala Gly
50      55      60
Pro Ala Arg Leu Gly Gly Val Arg Lys Pro Thr Thr Pro Gln Asn Gly
65      70      75      80
Ser Ser Thr Gly Phe Ile Asn Ser Leu Lys Ser Arg Gln Val Lys Asn
85      90      95
Ser Ile Pro Tyr Gly Leu Arg Cys Asp Thr Arg Ser Gly Trp Ile Gly
100      105      110

```

<210> 2401

<211> 479

<212> DNA

<213> Homo sapiens

<400> 2401

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 60
 tggatgtttg ccgcgctcaa cgtattccgc caccgcgagg ccaaggagct caacatcgat
 120
 gactttgagt ttccctttac ctacctgcag tacttcgaca aactagagcg cgccaacttc
 180
 gcgctcaacc aactgctgga tctcaccgaa gacggcaccg actgggatga ccgcgacgtg
 240
 gctacttccc tcgagctcac aggcgacgac ggcggctggt ggtcattttt caccaacctc
 300
 gtggacaagt acggcgagcgt cccggccgag gtcatgcctg aggtgcactc gtccggccac
 360
 accgaccaga tgaatcgca tatcgccacc atcatccgcc gcgccgcgca ccgtgcggtg
 420
 gaaggcgagg gggatcgagg gggcatcgct aagcaagccc gccccgatat ccaacgcgt
 479

<210> 2402

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2402

Xaa	Thr	Glu	Val	Lys	Leu	Asp	Ser	Leu	Gly	Val	Thr	Asp	Gln	Met	Arg
1				5					10					15	
Ser	Gly	Arg	Cys	Trp	Met	Phe	Ala	Ala	Leu	Asn	Val	Phe	Arg	His	Arg
			20					25					30		
Ala	Ala	Lys	Glu	Leu	Asn	Ile	Asp	Asp	Phe	Glu	Phe	Ser	Phe	Thr	Tyr
		35				40					45				
Leu	Gln	Tyr	Phe	Asp	Lys	Leu	Glu	Arg	Ala	Asn	Phe	Ala	Leu	Asn	Gln
	50				55					60					
Leu	Leu	Asp	Leu	Thr	Glu	Asp	Gly	Thr	Asp	Trp	Asp	Asp	Arg	Asp	Val
65				70				75						80	
Ala	Thr	Ser	Leu	Glu	Leu	Thr	Gly	Asp	Asp	Gly	Gly	Trp	Trp	Ser	Phe
			85				90							95	
Phe	Thr	Asn	Leu	Val	Asp	Lys	Tyr	Gly	Ala	Val	Pro	Ala	Glu	Val	Met
		100				105						110			
Pro	Glu	Val	His	Ser	Ser	Gly	His	Thr	Asp	Gln	Met	Asn	Arg	Asp	Ile
	115					120					125				
Ala	Thr	Ile	Ile	Arg	Arg	Ala	Ala	His	Arg	Ala	Val	Glu	Gly	Glu	Gly
	130				135						140				
Asp	Arg	Gly	Gly	Ile	Val	Lys	Gln	Ala	Arg	Pro	Asp	Ile	Gln	Arg	
145				150						155					

<210> 2403

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2403

ntcataaacg gcgataaccc gctggactcg tctgcggttc acccggaagc ctaccgctg
 60
 gtgcagcgta ttgccgccga gaccggccgt gatatccgtt cgctgatcgg tgacgccgcg
 120

ttcctcaagc gcctggaccc gaagaagtac accgacgaaa ccttcggtgt gccgaccatc
 180
 accgacatcc tgcaagagct ggaaaaacct ggccgcgacc cgcgtcccga gttcaagacc
 240
 gccgagttcc aggacggtgt tgaagacctc aaggacctgc agccgggcat gatcctcgaa
 300
 ggctgtgtca ccaacgtgac caactttggc gcctttgtgg atatcggcgt gcatcaggac
 360
 ggtttgggtgc acatctctgc acttttcg
 387

<210> 2404

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2404

Xaa	Met	Asn	Gly	Asp	Asn	Pro	Leu	Asp	Ser	Ser	Ala	Val	His	Pro	Glu
1			5						10					15	
Ala	Tyr	Pro	Leu	Val	Gln	Arg	Ile	Ala	Ala	Glu	Thr	Gly	Arg	Asp	Ile
			20					25					30		
Arg	Ser	Leu	Ile	Gly	Asp	Ala	Ala	Phe	Leu	Lys	Arg	Leu	Asp	Pro	Lys
		35					40					45			
Lys	Tyr	Thr	Asp	Glu	Thr	Phe	Gly	Val	Pro	Thr	Ile	Thr	Asp	Ile	Leu
	50					55					60				
Gln	Glu	Leu	Glu	Lys	Pro	Gly	Arg	Asp	Pro	Arg	Pro	Glu	Phe	Lys	Thr
65				70					75					80	
Ala	Glu	Phe	Gln	Asp	Gly	Val	Glu	Asp	Leu	Lys	Asp	Leu	Gln	Pro	Gly
			85					90					95		
Met	Ile	Leu	Glu	Gly	Val	Val	Thr	Asn	Val	Thr	Asn	Phe	Gly	Ala	Phe
		100						105					110		
Val	Asp	Ile	Gly	Val	His	Gln	Asp	Gly	Leu	Val	His	Ile	Ser	Ala	Leu
		115					120					125			

Ser

<210> 2405

<211> 859

<212> DNA

<213> Homo sapiens

<400> 2405

ttgcaagtaa catcaaaagt catctacaga agcaaaagac aaaaaggccc ctccacctgc
 60
 aaattaaatg gaataatttg ctttatgaga agctcaccat tggggtcatt cttatttttt
 120
 ctactccac atttcactac aaaccaagga aagctccctc atggaccgac atctggtgag
 180
 ccttcacttc tcccctggca atgcctggcc acctgacacc tggcctccct cctctttcca
 240
 gcaatcctgg taccaacgaa tggctacca ccacccaccc caatgcccag accgcagacc
 300
 tgcattcctc ccatctcaca gcccacaaac caaacggtta ttcattctac ctcccatcct
 360

actcctcacg aattttctcc accgtagact ctggttaatt ggactgactg aagcccaggg
 420
 gtcagtttct gtcctaagag cgctccaggt ggctgcaccc tgtgccaga gccaggcccc
 480
 ctgctatagg ctgctgcac tccccctgca ggtgctgggg acaccgcaac cctcctctg
 540
 gggacaccta cttgcctttg caggccctcg ggggtcactt ctcccaggaa gccgcctctg
 600
 ggtgaggtaa tatccctcta tcacagcatt ggccacacca cattgcaaac gctgctgggg
 660
 tccactgtct tcaccaatta caccatgagc tccacagact ccaggacat ggcttctacc
 720
 tctcagttcc cagtgttagc tatggggccc agcacacagg gaacagcagt tcaattaccc
 780
 agttcactga agggcagacc tgggatcata caggagcaa ggaagcttga gcccttcag
 840
 gagaagggga agaacggt
 859

<210> 2406

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2406

Met	Asp	Arg	His	Leu	Val	Ser	Leu	His	Leu	Ser	Pro	Gly	Asn	Ala	Trp
1				5					10					15	
Pro	Pro	Asp	Thr	Trp	Pro	Pro	Ser	Ser	Phe	Gln	Gln	Ser	Trp	Tyr	Gln
			20					25					30		
Arg	Met	Ala	His	His	His	Pro	Pro	Gln	Cys	Pro	Asp	Arg	Arg	Pro	Ala
		35					40				45				
Phe	Leu	Pro	Ser	His	Ser	Pro	Lys	Ser	Lys	Pro	Leu	Phe	Ile	Leu	Pro
	50					55					60				
Pro	Ile	Leu	Leu	Leu	Thr	Asn	Phe	Phe	His	Arg	Arg	Leu	Trp	Leu	Ile
65					70				75					80	
Gly	Leu	Thr	Glu	Ala	Gln	Gly	Ser	Val	Ser	Val	Leu	Arg	Ala	Leu	Gln
			85					90					95		
Val	Ala	Ala	Pro	Cys	Ala	Gln	Ser	Gln	Ala	Pro	Cys	Tyr	Arg	Leu	Ala
			100					105					110		
Ala	Leu	Pro	Leu	Gln	Val	Leu	Gly	Thr	Pro	Gln	Pro	Ser	Ser	Trp	Gly
		115					120					125			
His	Leu	Leu	Ala	Phe	Ala	Gly	Pro	Arg	Gly	Ser	Leu	Leu	Pro	Gly	Ser
	130					135					140				
Arg	Leu	Trp	Val	Arg											
145															

<210> 2407

<211> 303

<212> DNA

<213> Homo sapiens

<400> 2407

nacgcgtggt ttatcttcag catggtgac gcgattggt tagccgttat ggctgcggtc
 60

gtattcatcg agcaaggcca gcgacgtatc ccggtgcagt acgccaagcg gatggtggg
 120
 cgccgaatgt ttggtggctc gacgacgtac attccgctca aggtaaacca atctggcggt
 180
 atccccgtca tctttgcctc gtcgacctg taccttccgg tgctctacgc aactttccgg
 240
 ccgcagacgt ccgcggcaaa gtggatcggg cactacttca cgcgcggtga ccatccgggtg
 300
 tac
 303

<210> 2408

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2408

Xaa	Ala	Trp	Phe	Ile	Phe	Ser	Met	Val	Ile	Ala	Ile	Gly	Leu	Ala	Val
1			5						10				15		
Met	Ala	Ala	Val	Val	Phe	Ile	Glu	Gln	Gly	Gln	Arg	Arg	Ile	Pro	Val
			20					25					30		
Gln	Tyr	Ala	Lys	Arg	Met	Val	Gly	Arg	Arg	Met	Phe	Gly	Gly	Ser	Thr
		35					40					45			
Thr	Tyr	Ile	Pro	Leu	Lys	Val	Asn	Gln	Ser	Gly	Val	Ile	Pro	Val	Ile
		50				55					60				
Phe	Ala	Ser	Ser	Ile	Leu	Tyr	Leu	Pro	Val	Leu	Tyr	Ala	Thr	Phe	Arg
65				70						75				80	
Pro	Gln	Thr	Ser	Ala	Ala	Lys	Trp	Ile	Gly	His	Tyr	Phe	Thr	Arg	Gly
				85					90					95	
Asp	His	Pro	Val	Tyr											
			100												

<210> 2409

<211> 322

<212> DNA

<213> Homo sapiens

<400> 2409

ccatggtttc aagccccat tgtgtcagcc cagagagcaa ctggagaccc tctgacacca
 60
 cctccccggc caacaggagg ggaagccgaa attcagattg tggaaactgc ctacaatttt
 120
 cttccggcca aatgaccctc cctaggctac caagaccctg gcctaagggg agccgaggtc
 180
 tcggcccgac tgcagacgcc cgcaccctga ctccagatgc ctccgaggca tccaggtggg
 240
 ccctgagggg cctgctgtgg ctttgttctt gttggctggg ctgggggtct gacctggtga
 300
 gggacatgag tgtcagtgtg gg
 322

<210> 2410

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2410

```

Met Val Ser Ser Pro His Cys Val Ser Pro Glu Ser Asn Trp Arg Pro
 1             5             10             15
Ser Asp Thr Thr Ser Arg Pro Asn Arg Arg Gly Ser Arg Asn Ser Asp
             20             25             30
Cys Gly Asn Cys Leu Gln Phe Ser Ser Gly Gln Met Thr Leu Pro Arg
             35             40             45
Leu Pro Arg Pro Trp Pro Lys Gly Ser Arg Gly Leu Gly Pro Thr Ala
             50             55             60
Asp Ala Arg Thr Leu Thr Pro Asp Ala Ser Glu Ala Ser Arg Trp Ala
65             70             75             80
Leu Arg Gly Leu Leu Trp Leu Cys Ser Cys Trp Leu Gly Trp Gly Ser
             85             90             95
Asp Leu Val Arg Asp Met Ser Val Ser Val
             100             105

```

<210> 2411

<211> 371

<212> DNA

<213> Homo sapiens

<400> 2411

```

ccatgggctg ggtgctggag acacgagatc aggcaggccc tgcccctggg gctcattcta
60
gggtctgcgg cagacagggg gacagagggg gctgtgagag cctgaggct gagggtttt
120
ctggggaagc accatcccta gggacctccg cggttcggtca gtggccgctg ctgtcggtgt
180
gcagagcaga ggctggggcg agagtgggtca gcaggcctgc tgggtggcagc ttgtgcagga
240
agggaggatg gaggttggt tgtggctggc aagagggtgg catgcacgtc gctgaaaggc
300
aggcctgggc ccgaggcctg ggtgtgggga cgctgagga gactgtacag tgtggagtgc
360
ggggggctgc g
371

```

<210> 2412

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2412

```

Met Gly Trp Val Leu Glu Thr Arg Asp Gln Ala Gly Pro Ala Pro Gly
 1             5             10             15
Ala His Ser Arg Val Cys Gly Arg Gln Gly Asp Arg Gly Ser Cys Glu
             20             25             30
Ser Pro Glu Ala Glu Trp Leu Ser Gly Glu Ala Pro Ser Leu Gly Thr
             35             40             45
Ser Ala Phe Gly Gln Trp Pro Leu Leu Ser Val Cys Arg Ala Glu Ala
50             55             60
Gly Ala Arg Val Val Ser Arg Pro Ala Gly Gly Ser Leu Cys Arg Lys

```

```

65          70          75          80
Gly Gly Trp Arg Leu Ala Cys Gly Trp Gln Glu Gly Gly Met His Val
          85          90          95
Ala Glu Arg Gln Ala Trp Ala Arg Gly Leu Gly Val Gly Thr Pro Glu
          100          105          110
Glu Thr Val Gln Cys Gly Val Gly Gly Ala Ala
          115          120

```

<210> 2413
 <211> 784
 <212> DNA
 <213> Homo sapiens

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<400> 2413
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gtggctggat ttaggggtgca tataaaggca gtgaggctgg agaagtattc taggtctgct
120
taggctcact gaggaattgg gggtcttctt gaagagcatg gagcccttgg aggacctcca
180
cagcaggcag agagacggca gcctcctggg atctgattgc ccagccccac ttacacaggt
240
ggctgagggtg agctcttccc atggagtgca tccttcttga tcagcctgag gagagcaggg
300
ccccaccatc ctgcacctgg tgcagaaaaa ccctgtgaag ctgcactaca gaaagacacc
360
accagggtggc aggcttggag attgcatgga ggccccgccc cccccaacca attctttgat
420
aatagcacag tggtgaagag aggggggcat aaaagactga atccctgttc atgccaggct
480
ggctctgccc aacatatatg agactgcaag ttctgccact gtgggctgtg taccacaag
540
ccacagggtcc ctctgaacct gtgaatcagg tcttgggagc tattcgagca ggctggattt
600
tctcctctgc ctggggggac ctgagagtaa gttacagact tcatgacctc tcaccccaaa
660
acatttgagt atgtatcacc taagaacaag ggcattctcc tgtagaacca caatgcaatt
720
tgcaagttca ggaaatttaa ctgatacaat actattatct aattacggag agaagacaac
780
gcgt
784

```

<210> 2414
 <211> 137
 <212> PRT
 <213> Homo sapiens

```

<400> 2414
Met Lys Ser Val Thr Tyr Ser Gln Val Pro Arg Gly Arg Gly Glu Asn
1          5          10          15
Pro Ala Cys Ser Asn Ser Ser Gln Asp Leu Ile His Arg Phe Arg Gly
          20          25          30
Thr Cys Gly Leu Trp Val His Ser Pro Gln Trp Gln Asn Leu Gln Ser

```

```

<400> 2415
ctcgtgccag cgtcctcgcg ggtctgaatg gaagggctga ggtcgtcgtc ggcgcgagag
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agatcctgaa gccagaactc caccgccgcg cccgcgccat gcggcgggag aggtgcgggc
120
ccccccaccc gcgtcgccgc catggagggtg ctgcggcgct cttcggtctt cgctcgggag
180
atcatggacg cctttgatcg ctggcccaca gacaaggagc tggtgggcca ggctaaagca
240
ctaggccggg agtacgtgca cgcgcggctt ttgcgcgcg gcctctcctg gagcgctcca
300
gagcgtgcct cgctgcccc tggaggacgc ctggctgagg tgtgcgcggt gctgctgcgc
360
ctgggcatg agctggagat gatccggccc agcgtctacc gcaacgtggc gcgtcagctg
420
cacatctccc tgcagtctga gcctgtggtg accgatgcgt tcttggccgt ggctggccac
480
atcttctctg caggcatcac gtggggcaag gtggtgtccc tgtatgcggt ggccgcgggg
540
ctggccgtgg actgtgtgag gcaggcccag cctgccatgg tccacgcctt cgtggactgc
600
ctgggggagt tcgtgcgcaa gaccctggca acctggctgc ggagacgcgg cggatggact
660
gatgtcctca agtgtgtggt cagcacagac cctggcctcc gctcccactg gctggtggct
720
gcactctgca gcttcggccg ctctctgaag gctgccttct tcgtgctgct gccagagaga
780
tgagctgccc acctggcagt ggccgcagcc tggccctctg ggcccaacgc aggaggcctt
840
cagcaccgca acacatcttc ctctcccca cccgagcctg gagcactcta acctcggaga
900
ccccctaagc cccgttcctc cgcagacca ggccttcgg aagggtgagt ggggaggggc
960
ttctctgagc ctggagctgg gctttggggc agcctgcgac cctccccgct tgtgtccctt
1020

```

ctctgtgat ctctgtgttt tcccttttct ttctggggcc aggaagtcag ggtcaactcc
 1080
 caggcctcag gtgaaggggc ccagaacacc tgctctcacc tgagccccag gtgaaggggc
 1140
 ccgggaacac ctgctctcac ctgagcccca ggtgaagggg cccgggaaca cctgctctca
 1200
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 1260
 gcccgggaaca cctgctctca cctgagcccc aggtgaaggg gcccgggaaca cttgctctca
 1320
 cctgagcccc aggtgaaggg gcccgggaac acctctcacc tgaacccggg ggtcccatcc
 1380
 caggaagaag ggccatctca ggacatgagt cctcaggggc cctgcacatt caatctgaag
 1440
 gtgaccctgg cctggctgaa gctggaagag ctgtggggac tcagcctgta aacagagcgt
 1500
 aagggttcaca tgctggttgc ttaatccgtt tctggaggaa gagtatgaca ccacttgtg
 1560
 atggggctct tgtgcggtgg ggaccggggc cggcgggctc caggccagca cacctaacc
 1620
 atggatgtgg aacctacggc cgagaaggaa tgttgcatga gtcggatccc agtccattgt
 1680
 cagtggaggg tgagggtgac cccatctgct atttttgtgc tcctcctcat acaaccattt
 1740
 ggggatgtgc ctattagggc tccgtaagaa ctcagatgcc tgggaagccc agcccctcag
 1800
 gtgccccac acacagcctt cccttgacgc ctacatttct aggcacatgt gaggcattct
 1860
 tcctggagcc ccgagccagc cctgtccctc cccagtgcag catggcactc aggagataca
 1920
 ggctggacat ggggcagtcg ttctggggag gcctggccta gcagccaccc acctgagccc
 1980
 tcccggccag gcttcgtgct ggggtggggc atgtgccagg acaggagggt cccggcgga
 2040
 agccagcccc ggactcatcg tgacattgag atcccactgg agggtagggg tggttaataaa
 2100
 cttctccaaa cgataaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
 2160
 aaaa
 2164

<210> 2416

<211> 213

<212> PRT

<213> Homo sapiens

<400> 2416

Met	Glu	Val	Leu	Arg	Arg	Ser	Ser	Val	Phe	Ala	Ala	Glu	Ile	Met	Asp
1				5					10					15	
Ala	Phe	Asp	Arg	Trp	Pro	Thr	Asp	Lys	Glu	Leu	Val	Ala	Gln	Ala	Lys
			20					25					30		
Ala	Leu	Gly	Arg	Glu	Tyr	Val	His	Ala	Arg	Leu	Leu	Arg	Ala	Gly	Leu
		35					40					45			
Ser	Trp	Ser	Ala	Pro	Glu	Arg	Ala	Ser	Pro	Ala	Pro	Gly	Gly	Arg	Leu

50	55	60
Ala Glu Val Cys Ala Val Leu Leu Arg Leu Gly Asp Glu Leu Glu Met		
65	70	75
Ile Arg Pro Ser Val Tyr Arg Asn Val Ala Arg Gln Leu His Ile Ser		80
	85	90
Leu Gln Ser Glu Pro Val Val Thr Asp Ala Phe Leu Ala Val Ala Gly		95
	100	105
His Ile Phe Ser Ala Gly Ile Thr Trp Gly Lys Val Val Ser Leu Tyr		110
	115	120
Ala Val Ala Ala Gly Leu Ala Val Asp Cys Val Arg Gln Ala Gln Pro		125
	130	135
Ala Met Val His Ala Leu Val Asp Cys Leu Gly Glu Phe Val Arg Lys		140
145	150	155
Thr Leu Ala Thr Trp Leu Arg Arg Arg Gly Gly Trp Thr Asp Val Leu		160
	165	170
Lys Cys Val Val Ser Thr Asp Pro Gly Leu Arg Ser His Trp Leu Val		175
	180	185
Ala Ala Leu Cys Ser Phe Gly Arg Phe Leu Lys Ala Ala Phe Phe Val		190
	195	200
Leu Leu Pro Glu Arg		205
210		

<210> 2417

<211> 615

<212> DNA

<213> Homo sapiens

<400> 2417

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aaagctgattt gattttcata ttgatacctc aatagtttaag tgaaggacta gttattgctc
120

cagttgtagt ttttcacact ttaaaaaagg ctttcaatta taaaatcttt ctccattatt
180

acgttttttc acaactgtga tccacgccac agttgcaaata aatcaacata gaaaaattaa
240

ataacataat tgatgaaaag ttagtttttc acaaaaatac gaaaaatttc atcacctaga
300

gaggaaaatg ttatgacaac ctatttcgat aaaattgaaa aaatctcctt tgaggagaa
360

aaatccacaa atccttttgc tttcaaacat tatgatgcta atcaagtaat tttaggtaaa
420

actatggctg aacatttacg cttaacggtg tggtattggc ataccttttg ctggaatggg
480

aatgatatgt ttgggctagg ttctttggaa cgaagtggc agaaaaattc aaatttgctt
540

gctggcgag aacaaaaagc cgatattgct tttgagtttt tgaataagtt aggcgtgcct
600

tattattggt ttcat

615

<210> 2418

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2418

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Met Thr Thr Tyr Phe Asp Lys Ile Glu Lys Ile Ser Phe Glu Gly Glu
 1           5           10           15
Lys Ser Thr Asn Pro Phe Ala Phe Lys His Tyr Asp Ala Asn Gln Val
      20           25           30
Ile Leu Gly Lys Thr Met Ala Glu His Leu Arg Leu Thr Val Cys Tyr
      35           40           45
Trp His Thr Phe Cys Trp Asn Gly Asn Asp Met Phe Gly Leu Gly Ser
      50           55           60
Leu Glu Arg Ser Trp Gln Lys Asn Ser Asn Leu Leu Ala Gly Ala Glu
      65           70           75           80
Gln Lys Ala Asp Ile Ala Phe Glu Phe Leu Asn Lys Leu Gly Val Pro
      85           90           95
Tyr Tyr Cys Phe His
      100

```

<210> 2419

<211> 318

<212> DNA

<213> Homo sapiens

<400> 2419

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aaattttcag aagtcttggt gttgcgcggt caaacaggga ccgaggaggg acgaccgcct
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ccccgtgacg ctgcttcttc ttctgcctg cagctgaggg gtctgttttg tgctgcttcc
120
gtctcttctt caggtacaca gggggcagct tagcctctgg gatgggagtg gtttcataca
180
tgagacacat gcccagagtc aggtagatgt cgctgtcgtc ctgcggcggg gtgggtgggg
240
tccagaacgg catgacttct gtctgcccac cgacatcttc gtagacatac tccatgttgt
300
aggcatcccc tcacgcgt
318

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<210> 2420

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2420

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Met Glu Tyr Val Tyr Glu Asp Val Asp Gly Gln Thr Glu Val Met Pro
 1           5           10           15
Phe Trp Thr Pro Thr Pro Pro Gln Asp Asp Ser Asp Ile Tyr Leu
      20           25           30
Asp Ser Gly Met Cys Leu Met Tyr Glu Ala Thr Pro Ile Pro Glu Ala
      35           40           45
Lys Leu Pro Pro Val Tyr Val Arg Lys Glu Arg Lys Arg His Lys Thr
      50           55           60
Asp Pro Ser Ala Ala Gly Arg Lys Lys Lys Gln Arg His Gly Glu Ala
      65           70           75           80
Val Val Pro Pro Arg Ser Leu Phe Asp Arg Ala Thr Pro Gly Leu Leu

```

1751

gaatgcgcag actgcaagtc aaagggctct cgatgggcaa gtgtgaatct aggtatcttt
 180
 atatgcatga catgttctgg cattcataga agcctggggg tgcacatatt taaggtaaga
 240
 tctgccaccc tggatacatg gctgccagag caagttgcat ttattcaatc aatgggaaac
 300
 gaaaaagcaa atagctattg ggaagcagag ctgcctccta actacgatag gggttgaata
 360
 gagaatttga t
 371

<210> 2424

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2424

Met	Asn	Glu	Lys	Ala	Ser	Val	Ser	Lys	Glu	Leu	Asn	Ala	Lys	His	Lys
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Lys	Ile	Leu	Glu	Gly	Leu	Leu	Arg	His	Pro	Glu	Asn	Arg	Glu	Cys	Ala
		20					25					30			
Asp	Cys	Lys	Ser	Lys	Gly	Pro	Arg	Trp	Ala	Ser	Val	Asn	Leu	Gly	Ile
		35				40					45				
Phe	Ile	Cys	Met	Thr	Cys	Ser	Gly	Ile	His	Arg	Ser	Leu	Gly	Val	His
	50				55				60						
Ile	Ser	Lys	Val	Arg	Ser	Ala	Thr	Leu	Asp	Thr	Trp	Leu	Pro	Glu	Gln
65			70				75					80			
Val	Ala	Phe	Ile	Gln	Ser	Met	Gly	Asn	Glu	Lys	Ala	Asn	Ser	Tyr	Trp
		85					90					95			
Glu	Ala	Glu	Leu	Pro	Pro	Asn	Tyr	Asp	Arg	Val	Gly	Ile	Glu	Asn	Leu
		100					105					110			

<210> 2425

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2425

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 cccgtcctga acggctacga gatgaccgcg cgctgctgcg aacatgaagc cncgccatg
 120
 acctcccggc ctgcacgggg gtctcggtttc accgcccacg cccagcccga ggaacgcccc
 180
 cgctgcaagg aagccggcat gaacgactgc ctgttcaagc ccatcagcct gaccaccctc
 240
 aaccagaaac tcgccgacgt cagccgcgcg ccgcgtccga gccaggccgc cttcagcctc
 300
 gacggcctgc acgccctgac cgggggagag ccgctgctga tgcgtcgctt gatcgacgag
 360
 ctgctgagca gttgccaggc ggcccgcgag gcaactgctg gactgcccac c
 411

<210> 2426

<211> 137
 <212> PRT
 <213> Homo sapiens

<400> 2426
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 Asp Cys Asn Met Pro Val Leu Asn Gly Tyr Glu Met Thr Arg Arg Leu
 20 25 30
 Arg Glu His Glu Ala Xaa Ala Met Thr Ser Arg Pro Ala Arg Gly Phe
 35 40 45
 Gly Phe Thr Ala His Ala Gln Pro Glu Glu Arg Pro Arg Cys Lys Glu
 50 55 60
 Ala Gly Met Asn Asp Cys Leu Phe Lys Pro Ile Ser Leu Thr Thr Leu
 65 70 75 80
 Asn Gln Lys Leu Ala Asp Val Thr Pro Arg Pro Arg Pro Ser Gln Ala
 85 90 95
 Ala Phe Ser Leu Asp Gly Leu His Ala Leu Thr Gly Gly Glu Pro Leu
 100 105 110
 Leu Met Arg Arg Leu Ile Asp Glu Leu Leu Ser Ser Cys Gln Ala Ala
 115 120 125
 Arg Glu Ala Leu Leu Gly Leu Pro Ile
 130 135

<210> 2427
 <211> 293
 <212> DNA
 <213> Homo sapiens

<400> 2427
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 60
 tggagcgtaa aatgttgcag agcccagcta gaagccagga ggagcagaca ccttgctgat
 120
 ggagcccaac aagaaagatg ttgtgtccct cctggtgagc gctgtcccag tgcacccgat
 180
 aatggcgaag aaaatgtgcc tctttcagga aaagtatagg aaatgagaga agactgtgac
 240
 aactcatgac ctgcatacctt aatatccagt gacttcatct ccccttcacg cgt
 293

<210> 2428
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 2428
 His Asn Lys Gly Leu Gly Ile Leu Val Pro Cys Ala Ile Xaa Ala Ala
 1 5 10 15
 Phe Leu Leu Ile Trp Ser Val Lys Cys Cys Arg Ala Gln Leu Glu Ala
 20 25 30
 Arg Arg Ser Arg His Pro Ala Asp Gly Ala Gln Gln Glu Arg Cys Cys
 35 40 45
 Val Pro Pro Gly Glu Arg Cys Pro Ser Ala Pro Asp Asn Gly Glu Glu

50 55 60
 Asn Val Pro Leu Ser Gly Lys Val
 65 70

<210> 2429
 <211> 428
 <212> DNA
 <213> Homo sapiens

<400> 2429
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 atcgccgaga tggcggggct acaggctgct cagtcgatcc gggaatcctt gaacaaggct
 120
 gatgtcctgc tcaatgggggt agagacgtcg accgggtccgc agccgggtgc gcttgctttg
 180
 ctggaacagg ccgtacatga gctggatggc actggggatg ctgatacctcg cgccgctgag
 240
 ttggctgagc ggcggcgcca gatgtcgat gacctcactg acctcgctgc ttcggctcgt
 300
 ggccatgcgg ctcgggctga agctgatccg caacggcttg aggaattggg gggctggttg
 360
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 420
 actgcggc
 428

<210> 2430
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 2430
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 1 5 10 15
 Asp Asp Asp Leu Ile Ala Glu Met Ala Gly Leu Gln Ala Ala Gln Ser
 20 25 30
 Ile Arg Glu Ser Leu Asn Lys Ala Asp Val Leu Leu Asn Gly Val Glu
 35 40 45
 Thr Ser Thr Gly Pro Gln Pro Gly Ala Leu Ala Leu Leu Glu Gln Ala
 50 55 60
 Val His Glu Leu Asp Gly Thr Gly Asp Ala Asp Pro Arg Ala Ala Glu
 65 70 75 80
 Leu Ala Glu Arg Ala Arg Gln Met Ser Tyr Asp Leu Thr Asp Leu Ala
 85 90 95
 Ala Ser Val Ala Gly His Ala Ala Arg Ala Glu Ala Asp Pro Gln Arg
 100 105 110
 Leu Glu Glu Leu Gly Gly Arg Leu Ala Ala Ile Gln Arg Leu Leu Arg
 115 120 125
 Ala Arg Thr Thr Thr Leu Asp Asp Leu Leu Asp Ser Thr Ala
 130 135 140

<210> 2431
 <211> 409

<212> DNA

<213> Homo sapiens

<400> 2431

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120
aatggcgagg taacaatttc tggggcaaaa aatgccgcat taccaatcct atttgctact
180
ttattatctg aggggtgatat caatttaagc aatgtaccgc ttttaaaaga tattgccacc
240
actatcgagt tgtaaaaaga gctgggtgct actgctactc agactcaaca ctgcgtgcat
300
attaatgcga aagaagttaa gaactatact gcttcttatg aattagttag aagtatgcgt
360
gcttcaattt tggcattagg tccattgggt gctcggttcg gtgaagctt
409

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<210> 2432

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2432

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Met Gly Gln Phe Ile Ile Gln Gly Gly Cys Gln Leu Asn Gly Glu Val
1           5           10           15
Thr Ile Ser Gly Ala Lys Asn Ala Ala Leu Pro Ile Leu Phe Ala Thr
20          25          30
Leu Leu Ser Glu Gly Asp Ile Asn Leu Ser Asn Val Pro Leu Leu Lys
35          40          45
Asp Ile Ala Thr Thr Ile Glu Leu Leu Lys Glu Leu Gly Ala Thr Ala
50          55          60
Thr Gln Thr Gln His Cys Val His Ile Asn Ala Lys Glu Val Lys Asn
65          70          75          80
Tyr Thr Ala Ser Tyr Glu Leu Val Arg Ser Met Arg Ala Ser Ile Leu
85          90          95
Ala Leu Gly Pro Leu Val Ala Arg Phe Gly Glu Ala
100          105

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<210> 2433

<211> 655

<212> DNA

<213> Homo sapiens

<400> 2433

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120
gctctatgat gctcacgtaa caatgaaatc acggaatctc tctctcagaa catttccccg
180
ttgtgaagca gcacgtgact ataatctttt cccaggttta cccctgaagt tcaagtgcaa
240

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tgcccttgca cagcacagag caggggacga taggaggcgt gccttctcca gctgaaccac
 300
 cgggccagcc gggcgggcag tgggggttg ggggagggtt gacccattgg tgctgccacg
 360
 accaaagaga caggatcttg gagagagtga ggcctctgtg caggggacga tgaaggccca
 420
 atctggggac atcagggaaa gcagcaagggt tctggctgat tgtgcaaaaa gaactttttc
 480
 tgtgactgcc gtgttccaaa cacacccttt gcttttacia aaacccaaac tgggagggtt
 540
 agcaaaaggc acagtttcag agcataataa agacagagca gaatgggaga ggagggtta
 600
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 655

<210> 2434

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2434

Met	Ala	His	Leu	Ile	Asn	Leu	Leu	Ser	His	Ser	Ala	Leu	Ser	Leu	Leu
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Cys	Ser	Glu	Thr	Val	Pro	Phe	Ala	Lys	Pro	Pro	Ser	Leu	Gly	Phe	Cys
		20						25				30			
Lys	Ser	Lys	Gly	Cys	Val	Trp	Asn	Thr	Ala	Val	Thr	Glu	Lys	Val	Leu
	35					40					45				
Phe	Ala	Gln	Ser	Ala	Arg	Pro	Leu	Leu	Leu	Ser	Leu	Met	Ser	Pro	Asp
	50				55					60					
Trp	Ala	Phe	Ile	Val	Pro	Cys	Thr	Glu	Ala	Ser	Leu	Ser	Pro	Arg	Ser
65				70				75					80		
Cys	Leu	Phe	Gly	Arg	Gly	Ser	Thr	Asn	Gly	Ser	Thr	Leu	Pro	Pro	Thr
			85					90				95			
Pro	Thr	Ala	Arg	Pro	Ala	Gly	Pro	Val	Val	Gln	Leu	Glu	Lys	Ala	Arg
	100					105					110				
Leu	Leu	Ser	Ser	Pro	Ala	Leu	Cys	Cys	Ala	Gly	Ala	Leu	His	Leu	Asn
	115					120					125				
Phe	Arg	Gly	Lys	Pro	Gly	Lys	Arg	Leu							
	130					135									

<210> 2435

<211> 401

<212> DNA

<213> Homo sapiens

<400> 2435

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 120
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 240

aaactcgttg cggagtttga gaagctcaat ctgggcaatg gstatggacga aggtattacc
 300
 tgcggacctc tcgtcgagtc caaggctttg gagagcattg cggcattggt ggacgatgct
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 401

<210> 2436

<211> 133

<212> PRT

<213> Homo sapiens

<400> 2436

Lys Leu Ser Phe Thr Gly Ser Thr Pro Val Gly Arg Thr Leu Leu Lys
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 Xaa Ala Ala Asp Asn Val Leu Arg Thr Ser Met Glu Leu Gly Xaa Asn
 20 25 30
 Ala Pro Phe Ile Val Phe Glu Asp Ala Asp Ile Asp Gln Ala Val Gln
 35 40 45
 Gly Ala Met Gly Ala Lys Met Arg Asn Ile Gly Glu Ala Cys Thr Ala
 50 55 60
 Ala Asn Arg Phe Leu Val His Glu Ser Val Ala Glu Glu Phe Ser Glu
 65 70 75 80
 Lys Leu Val Ala Glu Phe Glu Lys Leu Asn Leu Gly Asn Gly Met Asp
 85 90 95
 Glu Gly Ile Thr Cys Gly Pro Leu Val Glu Ser Lys Ala Leu Glu Ser
 100 105 110
 Ile Ala Ala Leu Val Asp Asp Ala Ala Glu Lys Gly Ala Thr Ile Ser
 115 120 125
 Thr Gly Gly Lys Arg
 130

<210> 2437

<211> 449

<212> DNA

<213> Homo sapiens

<400> 2437

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 120
 atggtatgta tttttcaagc tagacgttca taatggtaga acatgaggag gaaaactgcc
 180
 tcttaaatcc caccattac tgtgacacag tgaccggtcc ctgcagcgga ctggatagtt
 240
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 300
 tgcctatgta cggatttggt ccaatgcctc agcctgacct cagggacctt cgggggtctg
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 agttccagtc atttcatttt atcgctgtg
 449

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<400> 2439
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120
atgtatctgt cttccacgga gccgccagcc gctgctgaat gggcatgtct gctgcgccct
180
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240
aagcggaggg acagcaatgc tgcccccttg ttggaaatcc tactgacca gtgcctcacc
300
tatgaacaga taacaggttg gtggtatagc gtacgtacct cagcctcaca cagcagtgcc
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480
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720
tcccgctctg ggggcctgga ggaatcccgg gaccggcccc gacccttcc tactgagcca
780

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gctgtgcggc ccaaggagcc tgggaccaag cgaaagggct tgggtgaggg ggtccccctca
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900
ggtccagggtg ggggcaaagc caaggcactg ggtggggctg gcagtgggag caagggctca
960
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gccgagatga gcctggatga cagcagcctg gccctggggc cagaggccag caccttcggg
1080
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1200
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1440
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1560
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1980
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2040
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2100
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2160
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2220
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2280
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2340
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2400

acagagaaga atgtgcctga gagttcccca cattccccct gtgagggctt tccatctgag
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2520
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2700
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2760
gccagtcca gtggaggagc ccgggcgaag actggtgaag ttggcaggta caagggccgc
2820
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2880
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<210> 2440

<211> 1306

<212> PRT

<213> Homo sapiens

<400> 2440

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Thr	Asp	Asn	Ile	Lys	Lys	Thr	Leu	His	Lys	Phe	Cys	Gly	Pro	Ser	Pro
			20					25					30		
Val	Val	Phe	Ser	Asp	Val	Asn	Ser	Met	Tyr	Leu	Ser	Ser	Thr	Glu	Pro
		35					40					45			
Pro	Ala	Ala	Ala	Glu	Trp	Ala	Cys	Leu	Leu	Arg	Pro	Leu	Arg	Gly	Arg
	50					55					60				
Glu	Pro	Glu	Gly	Val	Trp	Asn	Leu	Leu	Ser	Ile	Val	Arg	Glu	Met	Phe
65					70					75				80	
Lys	Arg	Arg	Asp	Ser	Asn	Ala	Ala	Pro	Leu	Leu	Glu	Ile	Leu	Thr	Asp
				85					90					95	
Gln	Cys	Leu	Thr	Tyr	Glu	Gln	Ile	Thr	Gly	Trp	Trp	Tyr	Ser	Val	Arg
			100					105					110		
Thr	Ser	Ala	Ser	His	Ser	Ser	Ala	Ser	Gly	His	Thr	Gly	Arg	Ser	Asn
		115					120					125			
Gly	Gln	Ser	Glu	Val	Ala	Ala	His	Ala	Cys	Ala	Ser	Met	Cys	Asp	Glu
	130					135						140			
Met	Val	Thr	Leu	Trp	Arg	Leu	Ala	Val	Leu	Asp	Pro	Ala	Leu	Ser	Pro
145					150					155				160	
Gln	Arg	Arg	Arg	Glu	Leu	Cys	Thr	Gln	Leu	Arg	Gln	Trp	Gln	Leu	Lys
				165					170					175	
Val	Ile	Glu	Asn	Val	Lys	Arg	Gly	Gln	His	Lys	Lys	Thr	Leu	Glu	Arg
			180					185					190		
Leu	Phe	Pro	Gly	Phe	Arg	Pro	Ala	Val	Glu	Ala	Cys	Tyr	Phe	Asn	Trp
		195					200					205			
Glu	Glu	Ala	Tyr	Pro	Leu	Pro	Gly	Val	Thr	Tyr	Ser	Gly	Thr	Asp	Arg
	210					215						220			
Lys	Leu	Ala	Leu	Cys	Trp	Ala	Arg	Ala	Leu	Pro	Ser	Arg	Pro	Gly	Ala
225					230					235				240	
Ser	Arg	Ser	Gly	Gly	Glu	Glu	Ser	Arg	Asp	Arg	Pro	Arg	Pro	Leu	
				245				250					255		
Pro	Thr	Glu	Pro	Ala	Val	Arg	Pro	Lys	Glu	Pro	Gly	Thr	Lys	Arg	Lys

1762

690		695		700
Glu Lys Gly Asp Leu Ala	Leu Ala Leu Met Ile Thr Tyr Lys Asp Asp			
705	710		715	720
Gln Ala Lys Leu Lys Lys	Ile Leu Asp Lys Leu Leu Asp Arg Glu Ser			
	725		730	735
Gln Thr His Lys Pro Gln Thr	Leu Ser Ser Phe Tyr Ser Ser Ser Arg			
	740		745	750
Pro Thr Thr Ala Ser Gln Arg	Ser Pro Ser Lys His Gly Gly Pro Ser			
	755		760	765
Ala Pro Gly Ala Leu Gln Pro	Leu Thr Ser Gly Ser Ala Gly Pro Ala			
	770		775	780
Gln Pro Gly Ser Val Ala Gly	Ala Gly Pro Gly Pro Thr Glu Gly Phe			
785	790		795	800
Thr Glu Lys Asn Val Pro Glu	Ser Ser Pro His Ser Pro Cys Glu Gly			
	805		810	815
Leu Pro Ser Glu Ala Ala Leu	Thr Pro Arg Pro Glu Gly Lys Val Pro			
	820		825	830
Ser Arg Leu Ala Leu Gly Ser	Arg Gly Gly Tyr Asn Gly Arg Gly Trp			
	835		840	845
Gly Ser Ser Gly Arg Pro Lys	Lys Lys His Thr Gly Met Ala Ser Ile			
	850		855	860
Asp Ser Ser Ala Pro Glu Thr	Thr Ser Asp Ser Ser Pro Thr Leu Ser			
865	870		875	880
Arg Arg Pro Leu Arg Gly Gly	Trp Ala Pro Thr Ser Trp Gly Arg Gly			
	885		890	895
Gln Asp Ser Asp Ser Ile Ser	Ser Ser Ser Ser Asp Ser Leu Gly Ser			
	900		905	910
Ser Ser Ser Ser Gly Ser Arg	Arg Ala Ser Ala Ser Gly Gly Ala Arg			
	915		920	925
Ala Lys Thr Val Glu Val Gly	Arg Tyr Lys Gly Arg Arg Pro Glu Ser			
	930		935	940
His Ala Pro His Val Pro Asn	Gln Pro Ser Glu Ala Ala Ala His Phe			
945	950		955	960
Tyr Phe Glu Leu Ala Lys Thr	Val Leu Ile Lys Ala Gly Gly Asn Ser			
	965		970	975
Ser Thr Ser Ile Phe Thr His	Pro Ser Ser Ser Gly Gly His Gln Gly			
	980		985	990
Pro His Arg Asn Leu His Leu	Cys Ala Phe Glu Ile Gly Leu Tyr Ala			
	995		1000	1005
Leu Gly Leu His Asn Phe Val	Ser Pro Asn Trp Leu Ser Arg Thr Tyr			
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Ser Ser His Val Ser Trp Ile	Thr Gly Gln Ala Met Glu Ile Gly Ser			
1025	1030		1035	1040
Ala Ala Leu Thr Ile Leu Val	Glu Cys Trp Asp Gly His Leu Thr Pro			
	1045		1050	1055
Pro Glu Val Ala Ser Leu Ala	Asp Arg Ala Ser Arg Ala Arg Asp Ser			
	1060		1065	1070
Asn Met Val Arg Ala Ala Ala	Glu Leu Ala Leu Ser Cys Leu Pro His			
	1075		1080	1085
Ala His Ala Leu Asn Pro Asn	Glu Ile Gln Arg Ala Leu Val Gln Cys			
	1090		1095	1100
Lys Glu Gln Asp Asn Leu Met	Leu Glu Lys Ala Cys Met Ala Val Glu			
1105	1110		1115	1120
Glu Ala Ala Lys Gly Gly Gly	Val Tyr Pro Glu Val Leu Phe Glu Val			

1125 1130 1135
 Ala His Gln Trp Phe Trp Leu Tyr Glu Gln Thr Ala Gly Gly Ser Ser
 1140 1145 1150
 Thr Ala Arg Glu Gly Ala Thr Ser Cys Ser Ala Ser Gly Ile Arg Ala
 1155 1160 1165
 Gly Gly Glu Ala Gly Arg Gly Met Pro Glu Gly Arg Gly Pro Gly
 1170 1175 1180
 Thr Glu Pro Val Thr Val Ala Ala Ala Val Thr Ala Ala Thr
 1185 1190 1195 1200
 Val Val Pro Val Ile Ser Val Gly Ser Ser Leu Tyr Pro Gly Pro Gly
 1205 1210 1215
 Leu Gly His Gly His Ser Pro Gly Leu His Pro Tyr Thr Ala Leu Gln
 1220 1225 1230
 Pro His Leu Pro Cys Ser Pro Gln Tyr Leu Thr His Pro Ala His Pro
 1235 1240 1245
 Ala His Pro Met Pro His Met Pro Arg Pro Ala Val Phe Pro Val Pro
 1250 1255 1260
 Ser Ser Ala Tyr Pro Gln Val Arg Pro Val Phe Cys Trp Gly Val Arg
 1265 1270 1275 1280
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 Glu Tyr Asn Trp Ser Val Gly Glu Ser Trp
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<210> 2441

<211> 2244

<212> DNA

<213> Homo sapiens

<400> 2441

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 120
 ccatttggtta ttttgggttt ggtgaacatg cactttgcgt catgcaaate aggtttctaa
 180
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 240
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 300
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 360
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 420
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 660
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 720

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2220
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2244

<210> 2442

<211> 168
 <212> PRT
 <213> Homo sapiens

<400> 2442
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 20 25 30
 Pro Ser Ala Asn Pro Ser Pro Pro Gly Ser His Pro Gln Leu Pro
 35 40 45
 Ala Arg Ser Pro Leu Pro Gly Pro Leu Pro Ser Pro Trp Cys Ser Leu
 50 55 60
 Ser Gln Gly Pro Ser Pro Ser Asp Phe Pro Gln Gly Ser Arg Leu Asp
 65 70 75 80
 Leu Glu Leu Cys Leu Pro Val Cys Ala Met Gly Ser Ala Ser Gly Leu
 85 90 95
 Glu Leu Arg Leu Phe Pro Gly Pro Gly Gln Gly Arg Pro Pro Leu Gly
 100 105 110
 Gly Ala Gly Ala Glu Leu Leu Arg Pro Glu Asp Tyr Ser Asp Arg Glu
 115 120 125
 Pro Val Phe Asp Leu Ser Val Pro Leu Asn Lys Gln Gln Lys Pro Lys
 130 135 140
 Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
 145 150 155 160
 Lys Lys Lys Lys Lys Lys Lys
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<210> 2443
 <211> 361
 <212> DNA
 <213> Homo sapiens

<400> 2443
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 120
 gtccatttga cgaaaaacga atttttaatt gtgcagactt tgtttacgca cccaataag
 180
 atctatacgc gcgatgaaat tatcgaagtc accttcggaa tggattatga ggcctttgac
 240
 cgtgccattg ataccatata caaaaacatt cgccagaaga ttgaagcgga tccgaaaaac
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 360
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 361

<210> 2444
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 2444

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Xaa Val Arg Ala Ile Leu Arg Arg Thr Pro Ser Arg Glu Asp Glu Lys
 1             5             10             15
Met Leu Gln Thr Ala Asp Gly Arg Leu Arg Ile Asp Ile Glu Ser Met
      20             25             30
Arg Thr Phe Val Glu Gly Lys Glu Val His Leu Thr Lys Asn Glu Phe
      35             40             45
Leu Ile Val Gln Thr Leu Phe Thr His Pro Asn Lys Ile Tyr Thr Arg
      50             55             60
Asp Glu Ile Ile Glu Val Thr Phe Gly Met Asp Tyr Glu Ala Phe Asp
65             70             75             80
Arg Ala Ile Asp Thr His Ile Lys Asn Ile Arg Gln Lys Ile Glu Ala
      85             90             95
Asp Pro Lys Asn Pro Val Tyr Ile Arg Thr Val Tyr Gly Val Gly Tyr
      100            105            110
Leu Pro Gly Gly Phe Asp Glu Ala
      115            120

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<210> 2445

<211> 403

<212> DNA

<213> Homo sapiens

<400> 2445

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120
aggaagcatg tttatcctgt tcagattact gcttctgccca ggctgctgct gctgttgggt
180
tctgcacatt tgctctttat taagcaaagt tcagagctgg gtgctggcaa gggaatcccc
240
tgtatttaca caggtaaacc tgagagccag agggcccca accatcctgg ctgcgagggga
300
caagctatta gagttaataa cagtgcactg gcattccttc aaaatcctaa tggaagcata
360
aataaaaaga ggaaagtccc ctttacccaa gaacctgaaa aan
403

```

<210> 2446

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2446

```

Met Glu Lys Glu His Arg Thr Lys Arg Lys His Val Tyr Pro Val Gln
 1             5             10             15
Ile Thr Ala Ser Ala Arg Leu Leu Leu Leu Leu Gly Ser Ala His Leu
      20             25             30
Leu Phe Ile Lys Gln Met Ser Glu Leu Gly Ala Gly Lys Gly Ile Pro
      35             40             45
Cys Ile Tyr Thr Gly Lys Pro Glu Ser Gln Arg Ala Pro Asn His Pro
      50             55             60
Gly Cys Glu Gly Gln Ala Ile Arg Val Asn Asn Ser Ala Leu Ala Phe

```

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<210> 2447
<211> 744
<212> DNA
<213> Homo sapiens
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<210> 2448
<211> 248
<212> PRT
<213> Homo sapiens
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1768

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65          70          75          80
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      85          90          95
Asp Ala Arg Arg Val Glu Val Val Glu Asp Ile Asp Ala Leu Asp Val
      100         105         110
Asp Thr His Lys Ala Gly Ser Gly Val Gly Thr Gly Gly Met Thr Thr
      115         120         125
Lys Leu Glu Ala Ala Arg Met Ala Thr Cys Ala Gly Val Pro Val Val
      130         135         140
Leu Ala Ala Ala Val Asp Ala Pro Asp Val Leu Ala Gly Ala Pro Val
145         150         155         160
Gly Thr Tyr Phe Arg Pro Leu Ala Thr Arg Arg Pro Arg Arg Leu Leu
      165         170         175
Trp Leu Ala Asp Ala Ala Thr Pro Gln Gly Gln Ile Val Ile Asp Asp
      180         185         190
Gly Ala Val Glu Ala Leu Thr Gln Arg His Ser Ser Leu Leu Ala Val
      195         200         205
Gly Val Thr Arg Val His Gly Asp Phe Gln Ala Gly Asp Pro Val Thr
      210         215         220
Ile Leu Ala Ser Asp Gly Arg Val Val Gly Arg Gly Ile Ala Gln Phe
225         230         235         240
Ser His Asp Glu Val Arg Val Met
      245

```

<210> 2449

<211> 296

<212> DNA

<213> Homo sapiens

<400> 2449

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120
tcgcattgcaa gattctccct cgccctgccg gacagtggcc tccatctacc tgcctgtctt
180
gctggactcc agaacactcc agtcttttcc ccttggggg ttgggggggg ccccccttt
240
ttttccccc ctttccctct tcattccaca ggaggccagc ctcaacatcc ccccc
296

```

<210> 2450

<211> 90

<212> PRT

<213> Homo sapiens

<400> 2450

```

Met Asn Thr Cys Arg His Gln Leu Pro Lys Ile Ser Tyr Cys Ser Pro
1          5          10         15
Leu Leu Pro Gly Pro Cys Pro Ile Pro Arg Gly Gln Thr Gly Leu Pro
20         25         30
Arg Met Gln Glu Ser Pro Ser Pro Cys Arg Thr Val Ala Ser Ile Tyr
35         40         45
Leu Pro Val Leu Leu Asp Ser Arg Thr Leu Gln Ser Phe Pro Pro Trp

```

50		55		60
Gly Leu Gly Gly Ala	Pro Pro Phe Phe Pro	Pro	Leu Ser Leu Phe Ile	
65	70	75	80	
Pro Gln Glu Ala Ser	Leu Asn Ile Pro Xaa			
	85	90		

<210> 2451

<211> 589

<212> DNA

<213> Homo sapiens

<400> 2451

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120
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aaggcctttg cagcggcgct acagtgcgtc gaccatggat gcgggcagtg caatgcctgt
300
cgaaccngcc tgtcaggcgc ccacctcgac gtcaccctcg tgcgtactga ggcgctgtct
360
attggcgtcg attgaggtcg tgaaatgggt ttgttcgagc gggcgatgaa ttcgggtccc
420
cggggcgtcc ccagggttgt cgtcgtcgaa gatgccgacc gcatactga acgcggagct
480
gacgccttgc ttaaagctat cgaggagcct gcgccgaaaa ccgtctggtt gctgtgtgcc
540
cctactccag aggacgtcat cgtcacgac aggtcgagat gtcggcgcc
589

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<210> 2452

<211> 121

<212> PRT

<213> Homo sapiens

<400> 2452

Leu Asp Cys Ser Thr Gly Glu Glu Ser Ser Gly Tyr Asp Val Gly Pro	
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Ile Cys Asn Asp Asp Leu Val Ser Asp Val Leu Thr Gly Val Trp Ala	
20	30
Asp Leu Val Gly Gln Glu Lys Ala Val Gly Val Leu Arg Arg Ala Ala	
35	45
Glu Ser Gln Pro Gly Arg Ser Ser His Ala Met Ser His Ala Trp Leu	
50	60
Ile Thr Gly Pro Pro Gly Ser Gly Arg Ser Asn Ala Ala Lys Ala Phe	
65	80
Ala Ala Ala Leu Gln Cys Val Asp His Gly Cys Gly Gln Cys Asn Ala	
85	95
Cys Arg Thr Xaa Leu Ser Gly Ala His Pro Asp Val Thr Leu Val Arg	
100	110
Thr Glu Ala Leu Ser Ile Gly Val Asp	
115	120

<210> 2453
 <211> 695
 <212> DNA
 <213> Homo sapiens

<400> 2453
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 agattcacac attcctacga gcacacatgt gcctgcatga gttattcccc atgtgaacac
 120
 acagggtggc acacgcacat gcccctgggt atgtctatgt ccattcatcc atcccagcct
 180
 gtgcacgtcc tctcactcct gtgttcacac ctatgcccaa atgaaccaag ggacacacat
 240
 gcacaccctt atgtggtgca cacacactcg tgcacacgga gccacaccag cacatgctca
 300
 gaggcatttg tgtgcgtggg catttgacgc atgactcaga acggagtatg ggggtggcgcg
 360
 gcgtggctgg ggagggtccca tcagcccgcc tctgaaaccc tcccaacctg cccatcctgg
 420
 cccaggcact gtgtctccgg cttgggcttc agccccggac cccaggacac cccggacaaa
 480
 gaggagctgc tctcgtctga agcctgctac gaatgcagga tcaatggcct ctcccctcgg
 540
 gaccggccac gacgcagtgc ccacaggagc caccagggtga catgggtgct gcactaggca
 600
 ggggtggcca gggaatgggt gagtgtggga aagaggctgt ggacccgact tagtcatgtc
 660
 agccccccga agaaggagca ccaggctcca gatct
 695

<210> 2454
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 2454
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 Ser Leu Leu Cys Ser His Leu Cys Pro Asn Glu Pro Arg Asp Thr His
 35 40 45
 Ala His Pro Tyr Val Val His Thr His Ser Cys Thr Arg Ser His Thr
 50 55 60
 Ser Thr Cys Ser Glu Ala Phe Val Cys Val Gly Ile Cys Ser Met Thr
 65 70 75 80
 Gln Asn Gly Val Trp Gly Gly Ala Ala Trp Leu Gly Arg Ser His Gln
 85 90 95
 Pro Ala Ser Glu Thr Leu Pro Thr Cys Pro Ser Trp Pro Arg His Cys
 100 105 110
 Val Ser Gly Leu Gly Phe Ser Pro Gly Pro Gln Asp Thr Pro Asp Lys
 115 120 125
 Glu Glu Leu Leu Ser Ser Glu Ala Cys Tyr Glu Cys Arg Ile Asn Gly

130 135 140
 Leu Ser Pro Arg Asp Arg Pro Arg Arg Ser Ala His Arg Asp His Gln
 145 150 155 160
 Val Thr Trp Val Leu His
 165

<210> 2455
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 2455
 acgcgtcggc agaagcgtca gctgaccgtc ggagccgata tgtccccagg cgctcgtcagc
 60
 ggaaccgcgc agaaggaaat ccacgcgctg ccgatcatga aggcgctccc catgggcgtc
 120
 aaagaactcg ttctgggcga atcgaagtgg caggacgagt tgatcaacaa cttcatcgtc
 180
 gcgctgtttg caggcgtggt gttgctgttc gcggtgctgg tgctgctgta ccggcgcttg
 240
 ctgccgcgt tcatcaacgt gatgtcgctg gcggtggcac cgctgggcgg gttgatcggc
 300
 ctgtggctga ccaacacgcc gatctcgatg ccggtctata tcggcttgat catgctgctc
 360
 ggcacgtcgc ccaagaat
 378

<210> 2456
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 2456
 Thr Arg Arg Gln Lys Arg Gln Leu Thr Val Gly Ala Asp Leu Ser Pro
 1 5 10 15
 Gly Val Val Ser Gly Thr Ala Gln Lys Glu Ile His Ala Leu Pro Ile
 20 25 30
 Met Lys Ala Leu Pro Met Gly Val Lys Glu Leu Val Leu Gly Glu Ser
 35 40 45
 Lys Trp Gln Asp Glu Leu Ile Asn Asn Phe Ile Val Ala Leu Phe Ala
 50 55 60
 Gly Val Val Leu Leu Phe Ala Val Leu Val Leu Tyr Arg Arg Leu
 65 70 75 80
 Leu Pro Pro Phe Ile Asn Val Met Ser Leu Ala Val Ala Pro Leu Gly
 85 90 95
 Gly Leu Ile Gly Leu Trp Leu Thr Asn Thr Pro Ile Ser Met Pro Val
 100 105 110
 Tyr Ile Gly Leu Ile Met Leu Leu Gly Ile Val Ala Lys Asn
 115 120 125

<210> 2457
 <211> 754
 <212> DNA
 <213> Homo sapiens

<400> 2457

cctaggaatt taccaccatc aaagacttac attaaccagc tatccatgaa ctcacctgag
 60
 atgagcgaat gtgacatctt gcacactctg cgatggctctt ctgggctccg gatcagctcc
 120
 tatgtcaact ggataaagga tcaccttatac aaacagggaa tgaaggctga gcatgctagc
 180
 tcgcttctag aactggcatc caccactaag tgtagctcag tgaatatga tgttgaaata
 240
 gtagaggaat acttcgctcg acagatctca tccttctgta gtatcgactg tgccaccatc
 300
 ttgcagctgc atgaaattcc cagtctgcag tccatctaca cccttgatgc cgcgattcta
 360
 aaaggcccg gtcttttttg gatgagcatt tttctaagat ggctgctgag actgacctc
 420
 ataagtcgctc tgagattacc aagaacctac ttccagccac gctgcaactc attgacacct
 480
 atgcacgtt caccagagcc tatttgctgc aaaacttta tgaagagga acaactgaga
 540
 aaccttccaa ggagaaactg caaggctttg ctgctgtttt ggctattggc tctagcaggt
 600
 gcaaggcaaa tactctgggt ccgacactgg ttcagaattt gccatcgtca gtgcagactg
 660
 tgtgtgagtc ctggaacaac atcaatacca atgaatttcc caatattgga tcttggcgca
 720
 atgcctttgc caatgacacc atcccttcac gcgt
 754

<210> 2458

<211> 236

<212> PRT

<213> Homo sapiens

<400> 2458

Met Asn Ser Pro Glu Met Ser Glu Cys Asp Ile Leu His Thr Leu Arg
 1 5 10 15
 Trp Ser Ser Arg Leu Arg Ile Ser Ser Tyr Val Asn Trp Ile Lys Asp
 20 25 30
 His Leu Ile Lys Gln Gly Met Lys Ala Glu His Ala Ser Ser Leu Leu
 35 40 45
 Glu Leu Ala Ser Thr Thr Lys Cys Ser Ser Val Lys Tyr Asp Val Glu
 50 55 60
 Ile Val Glu Glu Tyr Phe Ala Arg Gln Ile Ser Ser Phe Cys Ser Ile
 65 70 75 80
 Asp Cys Ala Thr Ile Leu Gln Leu His Glu Ile Pro Ser Leu Gln Ser
 85 90 95
 Ile Tyr Thr Leu Asp Ala Ala Ile Leu Lys Gly Pro Gly Leu Phe Gly
 100 105 110
 Met Ser Ile Phe Leu Arg Trp Leu Leu Arg Leu Ile Leu Ile Ser Arg
 115 120 125
 Leu Arg Leu Pro Arg Thr Tyr Phe Gln Pro Arg Cys Asn Ser Leu Thr
 130 135 140
 Pro Met His Arg Ser Pro Glu Pro Ile Cys Cys Lys Thr Leu Met Lys

```

145          150          155          160
Arg Glu Gln Leu Arg Asn Leu Pro Arg Arg Asn Cys Lys Ala Leu Leu
          165          170          175
Leu Phe Trp Leu Leu Ala Leu Ala Gly Ala Arg Gln Ile Leu Trp Val
          180          185          190
Arg His Trp Phe Arg Ile Cys His Arg Gln Cys Arg Leu Cys Val Ser
          195          200          205
Pro Gly Thr Thr Ser Ile Pro Met Asn Phe Pro Ile Leu Asp Pro Gly
          210          215          220
Ala Met Pro Leu Pro Met Thr Pro Ser Leu His Ala
225          230          235

```

<210> 2459

<211> 382

<212> DNA

<213> Homo sapiens

<400> 2459

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accggtgcac agatcgttct ggccgcgtgc actgccccgc tcaagcaaat cgctatcaac
60
gctggtcttg agggcggcgt cgtggctgag aaggctcgtg gtctgcccgc aggacagggc
120
ctcaacgcgg ccaatgacga gtatgtcgac atggtagagg ccggcatcat tgacccggcc
180
aaggtgaccc gttcggctct gcagaacgcc gcgtccatcg cggccctgtt cctcaccact
240
gaagccgtca tcgctgacaa gcccgagcct gttaaggctc ccgctggcgg cggtgatatg
300
gacggtatgg gtggcatggg cggcatgatg tgatcgtgta ttgccttcgc tgatttgagt
360
gggatgccac tttgccccag gc
382

```

<210> 2460

<211> 110

<212> PRT

<213> Homo sapiens

<400> 2460

```

Thr Gly Ala Gln Ile Val Leu Ala Ala Cys Thr Ala Pro Leu Lys Gln
1          5          10          15
Ile Ala Ile Asn Ala Gly Leu Glu Gly Gly Val Val Ala Glu Lys Val
          20          25          30
Ala Gly Leu Pro Ala Gly Gln Gly Leu Asn Ala Ala Asn Asp Glu Tyr
          35          40          45
Val Asp Met Val Glu Ala Gly Ile Ile Asp Pro Ala Lys Val Thr Arg
          50          55          60
Ser Ala Leu Gln Asn Ala Ala Ser Ile Ala Ala Leu Phe Leu Thr Thr
65          70          75          80
Glu Ala Val Ile Ala Asp Lys Pro Glu Pro Val Lys Ala Pro Ala Gly
          85          90          95
Gly Gly Asp Met Asp Gly Met Gly Gly Met Gly Gly Met Met
          100          105          110

```

<210> 2461
 <211> 558
 <212> DNA
 <213> Homo sapiens

<400> 2461
 tccggacaaa agggttcaat cgaagtatgg ttagcctttt ccaagtcgcc aggacggacc
 60
 tgcaatgctg tttgtcgtca tgctcggggg caagcaccca cgggctaaaa tcgaaattca
 120
 cgatgtggta ttcgcagtcg cggatacgtc gcaacacacc tacacccaat tgcgcgacgg
 180
 ctggttcggc agccctaagg tgtgcatatc gatgcgtgga tggccgtcga tggcgtcgac
 240
 ggctggaaaag tcgaactcag ccagatggcg ccgcctgccg acgcgcacatca cctgtacttc
 300
 atcaacctcg gcggtacga ggccaacgct tttggcgagg cccatcatta cctgctgggtg
 360
 gtcgcccggg acaaacagga agccaagcgc aaggggcagc ggcaaagtgt gcaacactgg
 420
 tcccaggccc acaccgatgg cgtaatggat atcgacgact gcttgccgat tgatctgggtg
 480
 gacggtcgct atgttcacct ggtgcaaggc ccgcaccagc cgatcatcca gcacaacgac
 540
 tacatcatcc tgccgcga
 558

<210> 2462
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 2462
 Met Val Ser Leu Phe Gln Val Ala Arg Thr Asp Leu Gln Cys Cys Leu
 1 5 10 15
 Ser Ser Cys Ser Gly Ala Ser Thr His Gly Leu Lys Ser Lys Phe Thr
 20 25 30
 Met Trp Tyr Ser Gln Ser Arg Ile Arg Cys Asn Thr Pro Thr Pro Asn
 35 40 45
 Cys Ala Thr Ala Gly Ser Ala Ala Leu Arg Cys Ala Tyr Arg Cys Val
 50 55 60
 Asp Gly Arg Arg Trp Arg Arg Arg Leu Glu Ser Arg Thr Gln Pro Asp
 65 70 75 80
 Gly Ala Ala Cys Arg Arg Ala Ser Pro Val Leu His Gln Pro Arg Arg
 85 90 95
 Leu Arg Gly Gln Arg Phe Trp Arg Gly Pro Ser Leu Pro Ala Gly Gly
 100 105 110
 Arg Pro Gly Gln Thr Gly Ser Gln Ala Gln Gly Ala Ala Asn Val
 115 120 125
 Ala Thr Leu Val Pro Gly Pro His Arg Trp Arg Asn Gly Tyr Arg Arg
 130 135 140
 Leu Leu Ala Asp
 145

<210> 2463
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 2463
 cccagggggt aagccatgag cctgttgagc caagtggccc gggcgccggt gagcgccaag
 60
 ttcggcctgc tgattattct gttatacgtc gcgctggcgc tgtgngcgcc gctgctggcg
 120
 ccctatggcg aaaccaggt ggtgggtgaa ggcttcgcgc cgtggagcgg ccagtttttg
 180
 ctgggcaccg ataacctggg gcgcgacatg ttcagccgcc tgatgtacgg cgcgcgcaat
 240
 accttgggca ttgccttcct gacgacgacg ctggcggttc tgctcgggtg tttgagcggg
 300
 ttggtcgcgg cgatcaaggg cgttgggtc gac
 333

<210> 2464
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2464
 Met Ser Leu Leu Ser Gln Val Ala Arg Ala Pro Leu Ser Ala Lys Phe
 1 5 10 15
 Gly Leu Leu Ile Ile Leu Leu Tyr Val Ala Leu Ala Leu Xaa Ala Pro
 20 25 30
 Leu Leu Ala Pro Tyr Gly Glu Thr Gln Val Val Gly Glu Gly Phe Ala
 35 40 45
 Pro Trp Ser Gly Gln Phe Leu Leu Gly Thr Asp Asn Leu Gly Arg Asp
 50 55 60
 Met Phe Ser Arg Leu Met Tyr Gly Ala Arg Asn Thr Leu Gly Ile Ala
 65 70 75 80
 Phe Leu Thr Thr Thr Leu Ala Phe Leu Leu Gly Gly Leu Ser Gly Leu
 85 90 95
 Val Ala Ala Ile Lys Gly Gly Trp Val Asp
 100 105

<210> 2465
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 2465
 nntcatgagg acatttcct catatttggt ggtggtaaata cctcctggg acacggggaa
 60
 atgaccagag gctggcgcc cacctggcag gaacagatgc cagctctgct gcagccatcg
 120
 ccccttgagc ggggtggctct gtgcctcttt ctgcactgct ggtgggtggg gctgttggct
 180
 ggggtgatga taccggctgc cagagatggc tcaggtgcca gctgctgggc tatctcaggc
 240

actggctgct gggctatctc gggtgccggc tgetgggcta tctcaggcgc tggctgctgc
 300
 tgggctgtct cgggtgctgg ctgttgggac gtctcctgtc ctggcactgg gctctcgggt
 360
 gctgggtgcc agctgctgcc taccttgac tgggctctgg gcactcactg cactcgggct
 420
 tttccatctc cgac
 434

<210> 2466

<211> 82

<212> PRT

<213> Homo sapiens

<400> 2466

Trp	Ile	Pro	Ala	Ala	Arg	Asp	Gly	Ser	Gly	Ala	Ser	Cys	Trp	Ala	Ile
1				5					10				15		
Ser	Gly	Thr	Gly	Cys	Trp	Ala	Ile	Ser	Gly	Ala	Gly	Cys	Trp	Ala	Ile
		20					25					30			
Ser	Gly	Ala	Gly	Cys	Cys	Trp	Ala	Val	Ser	Gly	Ala	Gly	Cys	Trp	Asp
		35				40						45			
Val	Ser	Cys	Pro	Gly	Thr	Gly	Leu	Ser	Gly	Ala	Gly	Cys	Gln	Leu	Leu
	50				55					60					
Pro	Thr	Leu	His	Trp	Ala	Leu	Gly	Thr	His	Cys	Thr	Arg	Ala	Phe	Pro
65				70					75					80	
Ser	Pro														

<210> 2467

<211> 306

<212> DNA

<213> Homo sapiens

<400> 2467

atggactcca ccggcaccgg agcaggggggt aaggggaaga agggagcggc cgggcgcaag
 60
 gtcggcgggc caaggaagaa gtcgggtgtcg aggtccgtga aggcgggtct ccagttcccc
 120
 gtcggccgca tcgggcgcta cttgaagaag ggccgctacg cgcagcgtgt cggcaccggc
 180
 gccccgtct acctcgccgc tgtcctcgaa tacctcgccg ctgaggttct ggagctcgcc
 240
 ggtaatgctg ccagggacaa caagaagact cgcattattc cgcgccacgt gcttctggcg
 300
 atccgg
 306

<210> 2468

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2468

Met Asp Ser Thr Gly Thr Gly Ala Gly Gly Lys Gly Lys Lys Gly Ala

```

      1             5             10             15
Ala Gly Arg Lys Val Gly Gly Pro Arg Lys Lys Ser Val Ser Arg Ser
      20             25             30
Val Lys Ala Gly Leu Gln Phe Pro Val Gly Arg Ile Gly Arg Tyr Leu
      35             40             45
Lys Lys Gly Arg Tyr Ala Gln Arg Val Gly Thr Gly Ala Pro Val Tyr
      50             55             60
Leu Ala Ala Val Leu Glu Tyr Leu Ala Ala Glu Val Leu Glu Leu Ala
      65             70             75             80
Gly Asn Ala Ala Arg Asp Asn Lys Lys Thr Arg Ile Ile Pro Arg His
      85             90             95
Val Leu Leu Ala Ile Arg
      100

```

<210> 2469

<211> 489

<212> DNA

<213> Homo sapiens

<400> 2469

```

gccggcgtgg cacatggctt cctgaagcc agcattgccc tggccaagga agctttgcag
60
aacagatgag atttcagctg ggacttgcag ccaagtggga tttggccttt tggggagaag
120
ggaaagggca ttcaaaggcc agggacagag tatggtcaaa ggcattggaga tgaggaagag
180
gggaccagag cagaggggtca ggttggaaag cgagttgggg tcaatctgca aaggggctga
240
cgtgccaggt aaaaaacagg agcacagttt agttttgtcg gatcatttca ggtggaaggg
300
cagtgggaat gttggagaaa acactttttg gtgtcggttac attgaatctg ctcatctata
360
agaataaaac tttatttcat agagttattg tatggctcaa aataggtatg aagaattaag
420
aaaaagaatt ttagatttaa aatgaaaagg cacctacaaa agtagagtgg tagagttacc
480
aacgtggag
489

```

<210> 2470

<211> 115

<212> PRT

<213> Homo sapiens

<400> 2470

```

Met Ala Ser Leu Lys Pro Ala Leu Pro Trp Pro Arg Lys Leu Cys Arg
      1             5             10             15
Thr Asp Glu Ile Ser Ala Gly Thr Cys Ser Gln Val Gly Phe Gly Leu
      20             25             30
Leu Gly Arg Arg Glu Arg Ala Phe Lys Gly Gln Gly Gln Ser Met Val
      35             40             45
Lys Gly Met Glu Met Arg Lys Arg Gly Pro Glu Gln Arg Val Arg Leu
      50             55             60
Glu Ser Glu Leu Gly Ser Ile Cys Lys Gly Ala Asp Val Pro Gly Lys

```

```

<400> 2472
Met Thr Phe Ser Phe Tyr Pro Thr Glu Leu Ser Leu Trp Ile Gln Ile
 1             5             10             15
Phe Gln Phe Phe Lys Gly Leu Tyr Val Met Gly Thr Leu Asp Phe Pro
 20             25             30
Val Asp Arg Ser Asn Val Leu Ser Val Ala Cys Met Val Ile Ala Gly
 35             40             45
Gly Glu Leu Lys Val Gly Thr Leu Glu Asn Pro Leu Glu Lys Glu Gln

```

50		55		60											
Lys	Leu	Leu	Ile	Leu	Leu	Arg	Ala	Ser	Glu	Gly	Val	Phe	Cys	Asp	Arg
65				70					75						80
Met	Asn	Gly	Ile	His	Ile	Asp	Pro	Gly	Thr	Ile	Gly	Val	Tyr	Gly	Lys
			85						90					95	
Val	His	Leu	Tyr	Ser	Ala	Tyr	Pro	Lys	Asn	Ser	Trp	Thr	His	Leu	Gly
		100						105					110		
Ala	Asp	Ile	Ala	Ser	Gly	Asn	Glu	Arg	Ile	Ile	Val	Glu	Asp	Ala	Val
	115					120					125				
Asp	Trp	Arg	Pro	His	Asp	Lys	Ile	Val	Leu	Ser	Ser	Ser	Ser	Tyr	Glu
	130				135					140					
Pro	His	Glu	Ala	Glu	Val	Leu	Thr	Val	Lys	Glu	Val	Lys	Gly	His	His
145				150					155					160	
Val	Arg	Ile	Tyr	Glu	Arg	Leu	Lys	His	Arg	His	Ile	Gly	Ser	Val	His
			165					170					175		
Val	Thr	Glu	Asp	Gly											
		180													

<210> 2473

<211> 698

<212> DNA

<213> Homo sapiens

<400> 2473

```

nngtgcacca agaaatggca gcctgacaag ctggtggtgg tatggactcg gcggaaccga
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cgcatctgct ccaaggccca cagctggcag ccgnnggcat ccagaaccca taccggggca
120
ccgtggtgtg gatggtacnc tgagaatgtg gacatctctg tgaccctcta cagggacccc
180
cacgtggacc agtatgaggc caaagagtgg acatttatta ttgaaaatga gtctaagggg
240
cagcggaagg tgctggccac ggccgaggtg gacctggccc gccatgccag ggcccgtgcc
300
ntgtccaagt ccnactgag gctgcggtg aagccaaagt cagtgaagac ggtgcaggct
360
gagctgagcc tcaactcttc cgggggtgctg ctgcgggagg gccgtgccac ggacgatgac
420
atgcagagtc tcgcaagcct catgagtgtg aagcctagt atgtgggcaa cttggatgac
480
tttgctgaga gtgatgaaga tgaggctcat ggcccaggag ccccgaggc ccgggctcga
540
gtccccagc caggtgggct cacagcctgc tgtggatcga gactgccaag acctggggag
600
ggagggttac ccgggccacc agccacttgc tgtgcccgcc ctgtgatggg aactcattac
660
tgcccaggca gtcccaacca acccagcagc ctcaattg
698

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<210> 2474

<211> 232

<212> PRT

<213> Homo sapiens

<400> 2474

Xaa Cys Thr Lys Lys Trp Gln Pro Asp Lys Leu Val Val Val Trp Thr
 1 5 10 15
 Arg Arg Asn Arg Arg Ile Cys Ser Lys Ala His Ser Trp Gln Pro Xaa
 20 25 30
 Ala Ser Arg Thr His Thr Gly Ala Pro Trp Cys Gly Trp Tyr Xaa Glu
 35 40 45
 Asn Val Asp Ile Ser Val Thr Leu Tyr Arg Asp Pro His Val Asp Gln
 50 55 60
 Tyr Glu Ala Lys Glu Trp Thr Phe Ile Ile Glu Asn Glu Ser Lys Gly
 65 70 75 80
 Gln Arg Lys Val Leu Ala Thr Ala Glu Val Asp Leu Ala Arg His Ala
 85 90 95
 Arg Ala Arg Ala Xaa Ser Lys Ser Xaa Leu Arg Leu Arg Leu Lys Pro
 100 105 110
 Lys Ser Val Lys Thr Val Gln Ala Glu Leu Ser Leu Thr Leu Ser Gly
 115 120 125
 Val Leu Leu Arg Glu Gly Arg Ala Thr Asp Asp Asp Met Gln Ser Leu
 130 135 140
 Ala Ser Leu Met Ser Val Lys Pro Ser Asp Val Gly Asn Leu Asp Asp
 145 150 155 160
 Phe Ala Glu Ser Asp Glu Asp Glu Ala His Gly Pro Gly Ala Pro Glu
 165 170 175
 Ala Arg Ala Arg Val Pro Gln Pro Gly Gly Leu Thr Ala Cys Cys Gly
 180 185 190
 Ser Arg Leu Pro Arg Pro Gly Glu Gly Gly Leu Pro Gly Pro Pro Ala
 195 200 205
 Thr Cys Cys Ala Arg Pro Val Met Gly Thr His Tyr Cys Pro Gly Ser
 210 215 220
 Pro Asn Gln Pro Ser Ser Leu Asn
 225 230

<210> 2475

<211> 1251

<212> DNA

<213> Homo sapiens

<400> 2475

ngcgcgcccc agatgcaggt gagcaagagg atgctggcgg ggggcgtgag gagcatgccc
 60
 agccccctcc tggcctgctg gcagcccatc ctctgctgg tgctgggctc agtgctgtca
 120
 ggctcgccca cgggctgccc gccccgctgc gaggctccg cccaggaccg cgctgtgctg
 180
 tgccaccgca agcgctttgt ggcagtcctc gagggcatcc ccaccgagac gcgcctgctg
 240
 gacctaggca agaaccgcat caaaacgctc aaccaggacg agttcgccag cttcccgcac
 300
 ctggaggagc tggagctcaa cgagaacatc gtgagcgccg tggagcccgg cgccttcaac
 360
 aacctcttca acctccggac gctgggtctc cgcagcaacc gcctgaagct catcccgcta
 420
 ggcgctcttca ctggcctcag caacctgacc aagctggaca tcagcgagaa caagatcggt
 480

atcctactgg actacatgtt tcaggacctg tacaacctca agtcactgga ggttggcgac
 540
 aatgacctcg tctacatctc tcaccgcgcc ttcagcggcc tcaacagcct ggagcagctg
 600
 acgctggaga aatgcaacct gacctccatc cccaccgagg cgctgtccca cctgcacggc
 660
 ctcacgtcc tgaggctccg gcacctcaac atcaatgcc a tccgggacta ctcttcaag
 720
 aggctgtacc gactcaaggt cttggagatc tcccactggc cctacttgga caccatgaca
 780
 cccaactgcc tctacggcct caacctgacg tccctgtcca tcacacactg caatctgacc
 840
 gctgtgccct acctggccgt ccgccaccta gtctatctcc gcttccctcaa cctctcctac
 900
 aaccccatca gcaccattga gggtccatg ttgcatgagc tgctccggct gcaggagatc
 960
 cagctgggtg gcgggcagct ggccgggtg agccctgcct tccgcggcct caactacctg
 1020
 cgcgtgtca atgtctctgg caaccagctg accacactgg aggaatcagt cttccactcg
 1080
 gtgggcaacc tggagacact catcctggac tccaaccgcg tggcctgcga ctgtcggctc
 1140
 ctgtgggtgt tccggcgccg tggcctacaa acttcaaccg gcagcagccc acgtgcgcca
 1200
 cgcccagatt tgtccagggg caaggagttc aaggacttcc ctgatgtgct a
 1251

<210> 2476

<211> 417

<212> PRT

<213> Homo sapiens

<400> 2476

Xaa	Ala	Pro	Glu	Met	Gln	Val	Ser	Lys	Arg	Met	Leu	Ala	Gly	Gly	Val
1			5					10					15		
Arg	Ser	Met	Pro	Ser	Pro	Leu	Leu	Ala	Cys	Trp	Gln	Pro	Ile	Leu	Leu
			20					25					30		
Leu	Val	Leu	Gly	Ser	Val	Leu	Ser	Gly	Ser	Ala	Thr	Gly	Cys	Pro	Pro
			35					40					45		
Arg	Cys	Glu	Cys	Ser	Ala	Gln	Asp	Arg	Ala	Val	Leu	Cys	His	Arg	Lys
			50				55				60				
Arg	Phe	Val	Ala	Val	Pro	Glu	Gly	Ile	Pro	Thr	Glu	Thr	Arg	Leu	Leu
					70					75				80	
Asp	Leu	Gly	Lys	Asn	Arg	Ile	Lys	Thr	Leu	Asn	Gln	Asp	Glu	Phe	Ala
				85					90					95	
Ser	Phe	Pro	His	Leu	Glu	Glu	Leu	Glu	Leu	Asn	Glu	Asn	Ile	Val	Ser
			100					105					110		
Ala	Val	Glu	Pro	Gly	Ala	Phe	Asn	Asn	Leu	Phe	Asn	Leu	Arg	Thr	Leu
			115				120					125			
Gly	Leu	Arg	Ser	Asn	Arg	Leu	Lys	Leu	Ile	Pro	Leu	Gly	Val	Phe	Thr
			130				135					140			
Gly	Leu	Ser	Asn	Leu	Thr	Lys	Leu	Asp	Ile	Ser	Glu	Asn	Lys	Ile	Val
			145				150			155				160	
Ile	Leu	Leu	Asp	Tyr	Met	Phe	Gln	Asp	Leu	Tyr	Asn	Leu	Lys	Ser	Leu

```

      165      170      175
Glu Val Gly Asp Asn Asp Leu Val Tyr Ile Ser His Arg Ala Phe Ser
      180      185      190
Gly Leu Asn Ser Leu Glu Gln Leu Thr Leu Glu Lys Cys Asn Leu Thr
      195      200      205
Ser Ile Pro Thr Glu Ala Leu Ser His Leu His Gly Leu Ile Val Leu
      210      215      220
Arg Leu Arg His Leu Asn Ile Asn Ala Ile Arg Asp Tyr Ser Phe Lys
      225      230      235      240
Arg Leu Tyr Arg Leu Lys Val Leu Glu Ile Ser His Trp Pro Tyr Leu
      245      250      255
Asp Thr Met Thr Pro Asn Cys Leu Tyr Gly Leu Asn Leu Thr Ser Leu
      260      265      270
Ser Ile Thr His Cys Asn Leu Thr Ala Val Pro Tyr Leu Ala Val Arg
      275      280      285
His Leu Val Tyr Leu Arg Phe Leu Asn Leu Ser Tyr Asn Pro Ile Ser
      290      295      300
Thr Ile Glu Gly Ser Met Leu His Glu Leu Leu Arg Leu Gln Glu Ile
      305      310      315      320
Gln Leu Val Gly Gly Gln Leu Ala Gly Trp Ser Pro Ala Phe Arg Gly
      325      330      335
Leu Asn Tyr Leu Arg Val Leu Asn Val Ser Gly Asn Gln Leu Thr Thr
      340      345      350
Leu Glu Glu Ser Val Phe His Ser Val Gly Asn Leu Glu Thr Leu Ile
      355      360      365
Leu Asp Ser Asn Pro Leu Ala Cys Asp Cys Arg Leu Leu Trp Val Phe
      370      375      380
Arg Arg Arg Gly Leu Gln Thr Ser Thr Gly Ser Ser Pro Arg Ala Pro
      385      390      395      400
Arg Pro Ser Leu Ser Arg Gly Lys Glu Phe Lys Asp Phe Pro Asp Val
      405      410      415
Leu

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<210> 2477

<211> 548

<212> DNA

<213> Homo sapiens

<400> 2477

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nagactgcga tcagacgcgc gtgccagct gaaccaggtg cgtgagaagg ctgccttcag
60
gtggccgggg gctccctcca gctgtctctg gacggaggga cgggaagtgg ccagaagggg
120
aagtgtgagg agttcccgtc cagcctgtca tcagtctccc caggtcttga agcggcggcc
180
ctgctcctgg ccgtgacat ggaccctctg gagacccta tcaaggatgg catcctctac
240
cagcagcatg tcaagtttgg caagaagtgc tggcggaagg tgtgggctct gctgtatgca
300
ggaggcccat caggcgtggc acggctggag aactgggagg tccgggatgg tggcctggga
360
gcagcgggtg acaggtcggc ggggcctggc cggcgagggg agcgacgggt catccgcctg
420

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gctgactgtg tgtccgtgct gccggctgac ggcgagagct gcccccgga caccggtgcc
 480
 ttcctgctca ccaccaccga gcgaagccat ctactggctg ctcagcaccg ccaggcctgg
 540
 atggggccc
 548

<210> 2478<211> 113

<212> PRT

<213> Homo sapiens

<400> 2478

Leu	Glu	Thr	Pro	Ile	Lys	Asp	Gly	Ile	Leu	Tyr	Gln	Gln	His	Val	Lys
1				5				10					15		
Phe	Gly	Lys	Lys	Cys	Trp	Arg	Lys	Val	Trp	Ala	Leu	Leu	Tyr	Ala	Gly
		20					25					30			
Gly	Pro	Ser	Gly	Val	Ala	Arg	Leu	Glu	Asn	Trp	Glu	Val	Arg	Asp	Gly
		35					40					45			
Gly	Leu	Gly	Ala	Ala	Gly	Asp	Arg	Ser	Ala	Gly	Pro	Gly	Arg	Arg	Gly
	50					55				60					
Glu	Arg	Arg	Val	Ile	Arg	Leu	Ala	Asp	Cys	Val	Ser	Val	Leu	Pro	Ala
65					70				75					80	
Asp	Gly	Glu	Ser	Cys	Pro	Arg	Asp	Thr	Gly	Ala	Phe	Leu	Leu	Thr	Thr
			85					90					95		
Thr	Glu	Arg	Ser	His	Leu	Leu	Ala	Ala	Gln	His	Arg	Gln	Ala	Trp	Met
			100					105					110		

Gly

<210> 2479

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2479

gaattcatgg aggtctatga ggaggatgaa gaatatgcgt atgaaaaata tgaaacccat
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 ttcggcacga gctggatgga ggagaccgca ggcaccttct cactgaactg gtatcgcagc
 120
 aggtactgga atgacaatga agcagcagaa aggcttgcgt tgatgtgggc taaaaccttc
 180
 aaatatgcgt cgataaacgt ctctggcag accgggatta gcaatagcga cgacgagggc
 240
 aatgaagatg aagacatggt ctacgccggt atctccattc cgctgggagg cggggcgtag
 300
 tctaactcct ggtatcgtga atat
 324

<210> 2480

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2480

Glu Phe Met Glu Val Tyr Glu Glu Asp Glu Glu Tyr Ala Tyr Glu Lys
 1 5 10 15
 Tyr Glu Thr His Phe Gly Thr Ser Trp Met Glu Glu Thr Ala Gly Thr
 20 25 30
 Phe Ser Leu Asn Trp Tyr Arg Ser Arg Tyr Trp Asn Asp Asn Glu Ala
 35 40 45
 Ala Glu Arg Leu Ala Leu Met Trp Ala Lys Thr Phe Lys Tyr Ala Ser
 50 55 60
 Ile Asn Val Ser Trp Gln Thr Gly Ile Ser Asn Ser Asp Asp Glu Gly
 65 70 75 80
 Asn Glu Asp Glu Asp Met Phe Tyr Ala Gly Ile Ser Ile Pro Leu Gly
 85 90 95
 Gly Gly Ala Tyr Ser Asn Ser Trp Tyr Arg Glu Tyr
 100 105

<210> 2481

<211> 484

<212> DNA

<213> Homo sapiens

<400> 2481

gcgttcacta acgcttcaac aaactcttac aagcgtcttg ttccctgggtt cgaagcacct
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 gttatgttgg cttactcagc tcgtaaccgt tctgcttcta tccgtatccc atacgttgca
 120
 agccctaaag gcaagcgtat tgaagctcgt ttccctgata caaccgctaa cccataccta
 180
 gcattttcag ctatgttgat ggctggtatc gatggtatca aaaacaagat tcaccctggc
 240
 gatgcagcag acaaagattt gtacgacctt ccagctgaag aagcagccgc tatccctcaa
 300
 gttgctagca gcttagaaga agcgcttaag tgcctagatc aagaccgtga gttcttgact
 360
 caaggtggcg ttttctctga cgacatgata gatgcttaca tcgctcttaa agcagaagaa
 420
 gcacagcgtg ttgcaatgac aacaacacca cttgagttcg aactttacta cagcctataa
 480
 gctt
 484

<210> 2482

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2482

Ala Phe Thr Asn Ala Ser Thr Asn Ser Tyr Lys Arg Leu Val Pro Gly
 1 5 10 15
 Phe Glu Ala Pro Val Met Leu Ala Tyr Ser Ala Arg Asn Arg Ser Ala
 20 25 30
 Ser Ile Arg Ile Pro Tyr Val Ala Ser Pro Lys Gly Lys Arg Ile Glu
 35 40 45
 Ala Arg Phe Pro Asp Pro Thr Ala Asn Pro Tyr Leu Ala Phe Ser Ala
 50 55 60

```

Met Leu Met Ala Gly Ile Asp Gly Ile Lys Asn Lys Ile His Pro Gly
65          70          75          80
Asp Ala Ala Asp Lys Asp Leu Tyr Asp Leu Pro Ala Glu Glu Ala Ala
      85          90          95
Ala Ile Pro Gln Val Ala Ser Ser Leu Glu Glu Ala Leu Lys Cys Leu
      100         105         110
Asp Gln Asp Arg Glu Phe Leu Thr Gln Gly Gly Val Phe Ser Asp Asp
      115         120         125
Met Ile Asp Ala Tyr Ile Ala Leu Lys Ala Glu Glu Ala Gln Arg Val
      130         135         140
Ala Met Thr Thr Thr Pro Leu Glu Phe Glu Leu Tyr Tyr Ser Leu
145          150          155

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<210> 2483

<211> 477

<212> DNA

<213> Homo sapiens

<400> 2483

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acgcgtgtta gccaaatctt ggttcctccc gttctctcct tacccgagcc tgaggccctt
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ctggagaaca ggcagcctct gaggaaacct ctgatccccc atcagccacc ccacgcctg
120
cgtccccagc cgttcctccc tggccttggt ccccccctcc tgtgaaggag agaacagttt
180
cggctggccc tgagatgctg gcaggcctgc agtcagggca gtgggcgcct cccaccttga
240
aatggtcctt cgtggtgcag ttctgcttac ggggtagact ttgttgctt ccacagagga
300
cagttagggt gggcaggaag gaagtctctg ccacaagtct gcattccagg ctgtttccag
360
aagtgggaat tctctcgtgc cctggagtct gggaatgcat ttttagtttc ccagcttcag
420
gtagaattga aattgagtga gccaaaccac cacatccatc tggagccagg aactagt
477

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<210> 2484

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2484

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Met His Ser Gln Thr Pro Gly His Glu Arg Ile Pro Thr Ser Gly Asn
1          5          10          15
Ser Leu Glu Cys Arg Leu Val Ala Glu Thr Ser Phe Leu Pro Thr Leu
      20          25          30
Thr Val Leu Cys Gly Arg Gln Gln Ser Leu Pro Arg Lys Gln Asn Cys
      35          40          45
Thr Thr Lys Asp His Phe Lys Val Gly Gly Ala His Cys Pro Asp Cys
      50          55          60
Arg Pro Ala Ser Ile Ser Gly Pro Ala Glu Thr Val Leu Ser Phe Thr
65          70          75          80
Gly Lys Gly Glu Gln Gly Gln Glu Glu Ala Ala Gly Asp Ala Gly Asp
      85          90          95

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Gly Val Ala Asp Arg Gly Ser Glu Val Ser Ser Glu Ala Ala Cys Ser
 100 105 110
 Pro Glu Gly Pro Gln Ala Arg Val Arg Arg Glu Arg Glu Glu Pro Arg
 115 120 125
 Phe Gly
 130

<210> 2485

<211> 608

<212> DNA

<213> Homo sapiens

<400> 2485

accggtgagg cgaagtgcgg tggcaattac gcagcttcgc tgcgttccca gatcgatgcc
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 aagaccgcgc actgcaacga ggtgctcttt gtcgatgcag ttgaacatcg ctggatcgag
 120
 gagctgggtg gtatgaactt catggccatc agcaaagacg gtcagctcgt ccccccgag
 180
 ctactgggca ccactctgcg tggcgtgacc cgcaagtcca ttctggaagt tgccccgac
 240
 ctcggtcttg aaccagtgga gcgcaagatc gatgttgacg agctccttga tggcgttcgc
 300
 tctggcgagt tcccgggaagt cttcgctgtt ggtaccgccc cggttgtcac accgatcggc
 360
 tctttcctag atggagatac cgacgtgaag gtctctgagc ccaccggaaa gaccacgatg
 420
 gagatccgtc gccgtctgct ggatatccag ttcggacgcg ctgaggacac ccatggctgg
 480
 ttgaagcgag tctgctgacg gcgtcgacga ccattggggc cggccccaat gatgtgttca
 540
 cgatcgggct acgacggtgt cgatgacaat gtcttgccgc tggaagggtt gcccgacggt
 600
 gaacgcgt
 608

<210> 2486

<211> 165

<212> PRT

<213> Homo sapiens

<400> 2486

Thr Gly Glu Ala Lys Cys Gly Gly Asn Tyr Ala Ala Ser Leu Arg Ser
 1 5 10 15
 Gln Ile Asp Ala Lys Thr Arg Asp Cys Asn Glu Val Leu Phe Val Asp
 20 25 30
 Ala Val Glu His Arg Trp Ile Glu Leu Gly Gly Met Asn Phe Met
 35 40 45
 Ala Ile Ser Lys Asp Gly Gln Leu Val Thr Pro Glu Leu Ala Gly Thr
 50 55 60
 Ile Leu Arg Gly Val Thr Arg Lys Ser Ile Leu Glu Val Ala Pro Asp
 65 70 75 80
 Leu Gly Leu Glu Pro Val Glu Arg Lys Ile Asp Val Asp Glu Leu Leu
 85 90 95

Asp Gly Val Arg Ser Gly Glu Phe Pro Glu Val Phe Ala Cys Gly Thr
 100 105 110
 Ala Ala Val Val Thr Pro Ile Gly Ser Phe Leu Asp Gly Asp Thr Asp
 115 120 125
 Val Lys Val Ser Glu Pro Thr Gly Lys Thr Thr Met Glu Ile Arg Arg
 130 135 140
 Arg Leu Leu Asp Ile Gln Phe Gly Arg Ala Glu Asp Thr His Gly Trp
 145 150 155 160
 Leu Lys Arg Val Cys
 165

<210> 2487

<211> 339

<212> DNA

<213> Homo sapiens

<400> 2487

nnccctcag gagagcagcc catggaaggt ccccccaag gggccctga gagccctgac
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 agtctgcaaa gaaaccagaa agagctccag ggcctcctga cccaggtgca agccctggag
 120
 aaggaggccg caagcagtgt ggacgtgcag gccctgcgga ggctctttga ggccgtgccc
 180
 cagctgggag gggctgctcc tcaggctcct gctgcccacc aaaagcccga ggcctcagtg
 240
 gagcaggcct ttggggagct gacacgggtc agcacggaag ttgctcaact gaaggaacag
 300
 accttggtaa ggctgctgga cattgaagag gctgtgcac
 339

<210> 2488

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2488

Xaa Pro Ser Gly Glu Gln Pro Met Glu Gly Pro Pro Gln Gly Ala Pro
 1 5 10 15
 Glu Ser Pro Asp Ser Leu Gln Arg Asn Gln Lys Glu Leu Gln Gly Leu
 20 25 30
 Leu Thr Gln Val Gln Ala Leu Glu Lys Glu Ala Ala Ser Ser Val Asp
 35 40 45
 Val Gln Ala Leu Arg Arg Leu Phe Glu Ala Val Pro Gln Leu Gly Gly
 50 55 60
 Ala Ala Pro Gln Ala Pro Ala Ala His Gln Lys Pro Glu Ala Ser Val
 65 70 75 80
 Glu Gln Ala Phe Gly Glu Leu Thr Arg Val Ser Thr Glu Val Ala Gln
 85 90 95
 Leu Lys Glu Gln Thr Leu Val Arg Leu Leu Asp Ile Glu Glu Ala Val
 100 105 110
 His

<210> 2489

<211> 594

<212> DNA

<213> Homo sapiens

<400> 2489

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 aactggctgg tcaccatcta tcacggccgg gtgcgtatca ccagccaggt tctttggacc
 120
 ctgggcttca tggtagcctt cgcgatcgga ggcgatgacc gcgtactgct ggccatcccc
 180
 ggtgctgact tcgtactgca caacagcctg ttcggaattg ctcaattcca caacgtgatc
 240
 atcgcggcgg cagtattcgg ctacatcgca ggtttcagct tctacttccc gaaagcggtc
 300
 ggcttcaagc tgcacgaaag ctggggcaag gctgcattct gggtctggat ctcgggcttc
 360
 ttcgtcgcgt tcattgccgt ctatgcactg ggtttcatgg gcatgaccgg ttgtttgaac
 420
 gcccccccca ccctgagtg ggtcccgta cgtacgttg ccatggtcgg tgcactgatg
 480
 atcgtgtcgt gtatcgctg ccagttgatt cagctgtatg tcagcgtgcg tgatcgcaag
 540
 cagaacatgt gcgaatccgg cgacccatgg aatgcacaca ccctggaatg gtcg
 594

<210> 2490

<211> 198

<212> PRT

<213> Homo sapiens

<400> 2490

Xaa	Ala	Phe	Phe	Gly	Leu	Ala	Thr	Met	Leu	Ile	Ser	Ile	Pro	Thr	Gly	1	5	10	15
Val	Lys	Leu	Phe	Asn	Trp	Leu	Val	Thr	Ile	Tyr	His	Gly	Arg	Val	Arg	20	25	30	
Ile	Thr	Ser	Gln	Val	Leu	Trp	Thr	Leu	Gly	Phe	Met	Val	Thr	Phe	Ala	35	40	45	
Ile	Gly	Gly	Met	Thr	Gly	Val	Leu	Leu	Ala	Ile	Pro	Gly	Ala	Asp	Phe	50	55	60	
Val	Leu	His	Asn	Ser	Leu	Phe	Gly	Ile	Ala	His	Phe	His	Asn	Val	Ile	65	70	75	80
Ile	Gly	Gly	Ala	Val	Phe	Gly	Tyr	Ile	Ala	Gly	Phe	Ser	Phe	Tyr	Phe	85	90	95	
Pro	Lys	Ala	Phe	Gly	Phe	Lys	Leu	His	Glu	Ser	Trp	Gly	Lys	Ala	Ala	100	105	110	
Phe	Trp	Phe	Trp	Ile	Ser	Gly	Phe	Phe	Val	Ala	Phe	Met	Pro	Leu	Tyr	115	120	125	
Ala	Leu	Gly	Phe	Met	Gly	Met	Thr	Arg	Cys	Leu	Asn	Ala	Pro	Pro	Thr	130	135	140	
Pro	Glu	Trp	Val	Pro	Tyr	Leu	Tyr	Val	Ala	Met	Val	Gly	Ala	Leu	Met	145	150	155	160
Ile	Ala	Val	Gly	Ile	Ala	Cys	Gln	Leu	Ile	Gln	Leu	Tyr	Val	Ser	Val	165	170	175	

Arg Asp Arg Lys Gln Asn Met Cys Glu Ser Gly Asp Pro Trp Asn Ala
 180 185 190
 His Thr Leu Glu Trp Ser
 195

<210> 2491
 <211> 592
 <212> DNA
 <213> Homo sapiens

<400> 2491
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 actacgttgt tgcttggtct attccatgca gtaacgacga atatgtcgcg atctcaggat
 120
 gatcttgacg tggtcgaaag cggaactgta ttccgcgccg tcaactccggc tgcggcaccg
 180
 cgtcccgggtg tcgacgagcg cccctccgat gaagtccttg ccgagatcga cgccgccttg
 240
 ccagcccagc cgcgcatgct cgcgcccggtg atctgtggca gctggctgcc cgatcgctgg
 300
 gatggagagt cgggtcaaggc tgactggcga cacgctgtgc tggtcgcccga gaaggctgct
 360
 gatgctcttg gcgtgaggct ggtgcgcaag gctgaccgtc aggtcccatg gcattcccgt
 420
 cgttgctcgg ctctcatcgt cgatgggaag gtcattggcc atgctggtga gttgcacccc
 480
 acagtagtgt cgaaggctgg tctgcctcag cgcacctgtg cggtcgagtt caatctagat
 540
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 592

<210> 2492
 <211> 197
 <212> PRT
 <213> Homo sapiens

<400> 2492
 Thr Arg His Ala Thr Val Lys Leu Ala Asn Pro Leu Asp Asp Thr Arg
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 Pro Tyr Leu Arg Thr Thr Leu Leu Pro Gly Leu Phe His Ala Val Thr
 20 25 30
 Thr Asn Met Ser Arg Ser Gln Asp Asp Leu Ala Val Phe Glu Ser Gly
 35 40 45
 Thr Val Phe Arg Ala Val Thr Pro Ala Ala Ala Pro Arg Pro Gly Val
 50 55 60
 Asp Glu Arg Pro Ser Asp Glu Val Leu Ala Glu Ile Asp Ala Ala Leu
 65 70 75 80
 Pro Ala Gln Pro Arg Met Leu Ala Ala Val Ile Cys Gly Ser Trp Leu
 85 90 95
 Pro Asp Arg Trp Asp Gly Glu Ser Val Lys Ala Asp Trp Arg His Ala
 100 105 110
 Val Leu Val Ala Gln Lys Ala Ala Asp Ala Leu Gly Val Arg Leu Val
 115 120 125

Arg Lys Ala Asp Arg Gln Ala Pro Trp His Pro Gly Arg Cys Ala Ala
 130 135 140
 Leu Ile Val Asp Gly Lys Val Ile Gly His Ala Gly Glu Leu His Pro
 145 150 155 160
 Thr Val Val Ser Lys Ala Gly Leu Pro Gln Arg Thr Cys Ala Val Glu
 165 170 175
 Phe Asn Leu Asp Ala Leu Val Ala Cys Ala Pro Ser Gly Gly Glu Val
 180 185 190
 Met Val Ile Ser Arg
 195

<210> 2493

<211> 418

<212> DNA

<213> Homo sapiens

<400> 2493

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 cccacacact atgagccgctc gctgcgtgac gttcggaccg tcgtgtattc gagagtcgcg
 120
 ctatcgaact acctcatgct cgaacctcat tcggtcatca agaccatcga ctcttcctta
 180
 cctacgggat ctatcaatgt ctccctggct gaggaagccc aaaagtacgg cgcacaagtg
 240
 atccccgtgg ttgaaaatgc caacctagac accgtgtggc tggggttgcg cgctcattggc
 300
 aagggcgcca ggcggggagc cgaccgtctt tctcgggtct acctccagct gacgtcgggtg
 360
 gaggggcctg gggacttcac tgcctatatc actgggacct ttggtcgacc tcagatct
 418

<210> 2494

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2494

Thr Arg Gln Val Ala Gly Asp Arg Ala Thr Val Thr Ser Met Val Pro
 1 5 10 15
 Ser Gly Ala Asp Pro His Thr Tyr Glu Pro Ser Leu Arg Asp Val Arg
 20 25 30
 Thr Val Val Tyr Ser Arg Val Ala Leu Ser Asn Tyr Leu Met Leu Glu
 35 40 45
 Pro His Ser Val Ile Lys Thr Ile Asp Ser Ser Leu Pro Thr Gly Ser
 50 55 60
 Ile Asn Val Ser Leu Ala Glu Glu Ala Gln Lys Tyr Gly Ala Gln Val
 65 70 75 80
 Ile Pro Leu Val Glu Asn Ala Asn Leu Asp Thr Val Trp Leu Gly Leu
 85 90 95
 Arg Val Ile Gly Lys Gly Ala Arg Arg Gly Ala Asp Arg Ser Ser Ser
 100 105 110
 Val Tyr Leu Gln Leu Thr Ser Val Glu Gly Pro Gly Asp Phe Thr Ala
 115 120 125

Tyr Ile Thr Gly Thr Phe Gly Arg Pro Gln Ile
130 135

<210> 2495
<211> 1478
<212> DNA
<213> Homo sapiens

<400> 2495
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60
agtcctcccg ccaggtcccg cggcccgcac ctgccgccc cactgcagc tccgcacctg
120
cggccagtgc ctactgccct ctcttgccgc ccgcacctgc agccccgcac ctgccgcttg
180
cactgcagc cccgcgctct acccggttca agcatggctg accaggcgcc cttcgacacg
240
gacgtcaaca ccctgaccgg cttcgtcatg gaggagggca ggaaggcccg cggcacgggc
300
gagttgacct agctgctcaa ctgcgtctgc acagcagtca aagccatctc ttcggcggtg
360
cgcaaggcgg gcacgcgcga cctctatggc attgctgggt ctaccaacgt gacaggtgat
420
caagttaaga agctggacgt cctctccaac gacctggtta tgaacatgtt aaagtcatcc
480
tttgccacgt gtgttctcgt gtcagaagaa gataaacacg ccatcatagt ggaaccggag
540
aaaaggggta aatatgtggt ctgttttgat ccccttgatg gatcttccaa catcgattgc
600
cttgtgtccg ttggaaccat ttttggcatc tatagaaaga aatcaactga tgagccttct
660
gagaaggatg ctctgcaacc aggcgggaac ctggtggcag ccggctacgc actgtatggc
720
agtgccacca tgctggctct tgccatggac tgtgggggtca actgcttcat gctggaccgg
780
gccatcgggg agttcatttt ggtggacaag gatgtgaaga taaaaaagaa aggtaaaatc
840
tacagcctta acgagggcta cgccaaggac tttgacctg ccgtcactga gtacatccag
900
aggaagaagt tccccccaga taattcagct ccttatgggg ccggtatgt gggctccatg
960
gtggctgatg ttcacgcac tctggtctac ggagggatat ttctgtaccc cgctaacaag
1020
aagagcccca atggaaagct gagactgctg tacgaatgca accccatggc ctacgtcatg
1080
gagaaggctg ggggaatggc caccactggg aaggaggccg tgtagacgt cattcccaca
1140
gacattcacc agaggggcgc ggtgatcttg gggcccccg acgacgtgct cgagttcctg
1200
aaggtgtatg agaagcactc tgcccagtga gcacctgccc tgctgcatc cggagaattg
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cctctacctg gaccttttgt ctcacacagc agtaccctga cctgctgtgc accttacatt
1320

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<210> 2496
<211> 338
<212> PRT
<213> Homo sapiens
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1793

325 330 335

Ala Gln

<210> 2497
 <211> 399
 <212> DNA
 <213> Homo sapiens

<400> 2497
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 60
 cttggctacc tgccacagga tccccgcgac ccagacatgg aaatgatcgc gagggcaagg
 120
 atcctgtcag cgcgtggcct ggaccacata ctggaacgga tgcgcaccct ggagtatcag
 180
 atggcgaacg gttccgagga cgaccgtgcc gttgcatgga acaaatacgc gaaggctgaa
 240
 gaccgtctcg tcgcggccgg tggtatggc gcctctgcag aggcagcccg aatcgcgtcg
 300
 aacttggggc ttgacgaccg cgtcctttcc cagccgttga aaaacctctc ggggtggtcag
 360
 cgctcgtcgc tcgagctggc gcgcatactc ttttcgga
 399

<210> 2498
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 2498
 Thr Arg Val Leu Ala Gly Glu Thr Leu Pro Ala Ala Gly Ser Val Arg
 1 5 10 15
 Arg Thr Gly Glu Leu Gly Tyr Leu Pro Gln Asp Pro Arg Asp Pro Asp
 20 25 30
 Met Glu Met Ile Ala Arg Ala Arg Ile Leu Ser Ala Arg Gly Leu Asp
 35 40 45
 His Ile Leu Glu Arg Met Arg Thr Leu Glu Tyr Gln Met Ala Asn Gly
 50 55 60
 Ser Glu Asp Asp Arg Ala Val Ala Met Asp Lys Tyr Ala Lys Ala Glu
 65 70 75 80
 Asp Arg Leu Val Ala Ala Gly Gly Tyr Gly Ala Ser Ala Glu Ala Ala
 85 90 95
 Arg Ile Ala Ser Asn Leu Gly Leu Asp Asp Arg Val Leu Ser Gln Pro
 100 105 110
 Leu Lys Asn Leu Ser Gly Gly Gln Arg Arg Arg Val Glu Leu Ala Arg
 115 120 125
 Ile Leu Phe Ser Gly
 130

<210> 2499
 <211> 348
 <212> DNA
 <213> Homo sapiens

<400> 2499

nggccgggcg aagacccgtt ctatatggcc taccacgaca ccgagtgggg cgtgccggaa
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 tatgacgacc gcgcattgta cgagaagctc attctcgacg gattccaggc cggcctgtcg
 120
 tggatcacca tcctgcgcaa gcgcgacaac tttcgcaaag ccttcgacga tttccagccc
 180
 gagaagatag cgcgttacia tgagaagaag gttcacgcgc tgatgaacga tgccggcatc
 240
 gtgcgcaacc gcgccaagat cgaaggcacg atcgccagcg cgaaggcgta tctcgacatc
 300
 atggaaaaag gcccgggcctt ctccaggctg ctgtgggact tcgtcgac
 348

<210> 2500

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2500

Xaa	Pro	Gly	Glu	Asp	Pro	Phe	Tyr	Met	Ala	Tyr	His	Asp	Thr	Glu	Trp
1				5					10					15	
Gly	Val	Pro	Glu	Tyr	Asp	Asp	Arg	Ala	Leu	Tyr	Glu	Lys	Leu	Ile	Leu
		20					25						30		
Asp	Gly	Phe	Gln	Ala	Gly	Leu	Ser	Trp	Ile	Thr	Ile	Leu	Arg	Lys	Arg
	35					40					45				
Asp	Asn	Phe	Arg	Lys	Ala	Phe	Asp	Asp	Phe	Gln	Pro	Glu	Lys	Ile	Ala
	50				55					60					
Arg	Tyr	Asn	Glu	Lys	Lys	Val	His	Ala	Leu	Met	Asn	Asp	Ala	Gly	Ile
65				70					75					80	
Val	Arg	Asn	Arg	Ala	Lys	Ile	Glu	Gly	Thr	Ile	Ala	Ser	Ala	Lys	Ala
		85					90						95		
Tyr	Leu	Asp	Ile	Met	Glu	Lys	Gly	Pro	Gly	Phe	Ser	Arg	Leu	Leu	Trp
	100						105						110		
Asp	Phe	Val	Asp												
		115													

<210> 2501

<211> 569

<212> DNA

<213> Homo sapiens

<400> 2501

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 120
 acttagcaca gggcctgacc tatagtaatg gtcaagaatg atagcggggg tgaggtatgg
 180
 ctttcaagag tcaaacaatt ttactggtgc atcatttcca tttattcttt ctcttttgca
 240
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 300

tagattctat agcttcaact ccctgaagag atgtgtgcta atttacctca aaaaaatcct
 360
 taagggtata aaatatgccca agaactgtca acatcacaga ttaccactgg tagcttctgg
 420
 tatattgtta agtttccact taatttttaa gggacactag agaattagta tgactcacct
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 569

<210> 2502

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2502

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Gly	Ala	Ser	Phe	Pro	Phe	Ile	Leu	Ser	Leu	Leu	His	Asn	Lys	Thr	Thr
			20					25					30		
Leu	Lys	Ile	Leu	Pro	Trp	Leu	Val	Arg	Asp	Asn	Ser	Ser	Leu	Glu	Ser
			35				40					45			
Arg	Phe	Tyr	Ser	Phe	Asn	Ser	Leu	Lys	Arg	Cys	Val	Leu	Ile	Tyr	Ile
			50			55				60					
Lys	Lys	Ile	Leu	Lys	Gly	Ile	Lys	Tyr	Ala	Lys	Asn	Cys	Gln	His	His
65				70					75					80	
Arg	Leu	Pro	Leu	Val	Ala	Ser	Gly	Ile	Leu	Leu	Ser	Phe	His	Leu	Ile
			85					90						95	
Phe	Lys	Gly	His												
			100												

<210> 2503

<211> 419

<212> DNA

<213> Homo sapiens

<400> 2503

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 120
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 180
 tcgtccttgg catcacccat gaggtctctg acaccttcgg cctccccagc catcccgct
 240
 ctcgtccatt gcgcagacaa aagcctcccg tggaagatgg gcgtcagccc tgggaatcct
 300
 gttgattccc acgcctatcc tcacatccag aacagtaagc agcccagggt tccctctgcc
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 419

<210> 2504

<211> 121
 <212> PRT
 <213> Homo sapiens

<400> 2504
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 Leu Tyr Ser Pro Val Cys Thr Asn Gly Glu Arg Phe Leu Tyr Leu Pro
 20 25 30
 Pro Pro His Tyr Val Gly Pro His Ile Pro Ser Ser Leu Ala Ser Pro
 35 40 45
 Met Arg Leu Ser Thr Pro Ser Ala Ser Pro Ala Ile Pro Pro Leu Val
 50 55 60
 His Cys Ala Asp Lys Ser Leu Pro Trp Lys Met Gly Val Ser Pro Gly
 65 70 75 80
 Asn Pro Val Asp Ser His Ala Tyr Pro His Ile Gln Asn Ser Lys Gln
 85 90 95
 Pro Arg Val Pro Ser Ala Lys Ala Val Thr Ser Gly Leu Pro Gly Asp
 100 105 110
 Thr Ala Leu Leu Leu Pro Pro Ser Arg
 115 120

<210> 2505
 <211> 540
 <212> DNA
 <213> Homo sapiens

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 120
 acgaatgggc gtgtcatggc cgccatcgcg tggatcgtcg tggcagcagt ctcggctctc
 180
 aacgtggttc tcgtcgtcga gacggtcatg ggtgcatgat ccttgagggc agttttctgg
 240
 cgacaatcgt gaaaatgagt gacaaactca agcgggtgac gacgccgaac cccgcaccga
 300
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 360
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 420
 cgtcgggtgc agtcgtcccg gctgttgtgt cgggtgctgt gggtaatggt tcgacgaccc
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<210> 2506
 <211> 72
 <212> PRT
 <213> Homo sapiens

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Ser Met Gly Leu Pro Leu Val Leu Val Pro Leu Ala Arg Phe Thr Gly			
	20	25	30
Asp Arg Arg Leu Met Gly Gln Trp Thr Asn Gly Arg Val Met Ala Ala			
	35	40	45
Ile Ala Trp Ile Val Val Ala Ala Val Ser Ala Leu Asn Val Val Leu			
	50	55	60
Val Val Glu Thr Val Met Gly Ala			
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<210> 2507

<211> 922

<212> DNA

<213> Homo sapiens

<400> 2507

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 180
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 300
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 360
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 420
 aagaatgggc tgcaactgtgc cttcgcgcac gggccccatg acctccgctc cctgtctac
 480
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 540
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 660
 aagaagcccc cgcggctgtg ccgccaaggc tatgcctgtc cctactacca caacagcaag
 720
 gaccggcggc ggagcccccg gaagcacaaa tacaggctcg ctccatgtcc aaacgtcaag
 780
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<210> 2508

<211> 278

<212> PRT

<213> Homo sapiens

<400> 2508

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 20           25           30
His Trp His Phe Leu Asn Gln Arg Arg Arg Arg Pro Leu Arg Arg Arg
 35           40           45
Asp Gly Thr Phe Asn Tyr Ser Pro Asp Val Tyr Cys Ser Lys Tyr Asn
 50           55           60
Glu Ala Thr Gly Val Cys Pro Asp Gly Asp Glu Cys Pro Tyr Leu His
 65           70           75           80
Arg Thr Thr Gly Asp Thr Glu Arg Lys Tyr His Leu Arg Tyr Tyr Lys
 85           90           95
Thr Gly Thr Cys Ile His Glu Thr Asp Ala Arg Gly His Cys Val Lys
100           105           110
Asn Gly Leu His Cys Ala Phe Ala His Gly Pro His Asp Leu Arg Ser
115           120           125
Pro Val Tyr Asp Ile Arg Glu Leu Gln Ala Met Glu Ala Leu Gln Asn
130           135           140
Gly Gln Thr Thr Val Glu Gly Ser Ile Glu Gly Gln Ser Ala Gly Ala
145           150           155           160
Ala Ser His Ala Met Ile Glu Lys Ile Leu Ser Glu Glu Pro Arg Trp
165           170           175
Gln Glu Thr Ala Tyr Val Leu Gly Asn Tyr Lys Thr Glu Pro Cys Lys
180           185           190
Lys Pro Pro Arg Leu Cys Arg Gln Gly Tyr Ala Cys Pro Tyr Tyr His
195           200           205
Asn Ser Lys Asp Arg Arg Arg Ser Pro Arg Lys His Lys Tyr Arg Ser
210           215           220
Ser Pro Cys Pro Asn Val Lys His Gly Asp Glu Trp Gly Asp Pro Gly
225           230           235           240
Lys Cys Glu Asn Gly Asp Ala Cys Gln Tyr Cys His Thr Arg Thr Glu
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Gln Gln Phe His Pro Glu Ile Tyr Lys Ser Thr Lys Cys Asn Gly Arg
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275

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<210> 2509

<211> 348

<212> DNA

<213> Homo sapiens

<400> 2509

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gttcatgaac gggtaggagcc cggcaaaacc gaaactcaac caatccttgg ggatgctgga
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cggcagggttg ccgagggcaa acacgttgac cacgttcgca ccgacaccac cgaccacggc
240
caccgctccc agcgaatct cgtagactta gcgccagggt tggtaaggcg tgtagcggtc
300

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348

<210> 2510

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2510

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Phe	Val	Asp	Ala	Arg	Glu	Val	Leu	Leu	Pro	Ala	Thr	Ile	Gly	Leu	Asp
			20					25						30	
Val	His	Glu	Arg	Val	Glu	Pro	Gly	Lys	Thr	Glu	Thr	Gln	Pro	Ile	Leu
			35					40						45	
Gly	Asp	Ala	Gly	Arg	Gln	Val	Ala	Glu	Gly	Lys	His	Val	Asp	His	Val
			50					55						60	
Arg	Thr	Asp	Thr	Thr	Asp	His	Gly	His	Arg	Ser	Gln	Arg	Asn	Leu	Val
						70					75			80	
Asp	Leu	Ala	Pro	Gly	Leu	Val	Arg	Arg	Val	Ala	Val	Val	Thr	Thr	Gly
						85								95	
Asp	Leu	Glu	Leu	Gly	Ala	Ser	Lys	Ser	Ser	Ala	Val				
						100					105				

<210> 2511

<211> 663

<212> DNA

<213> Homo sapiens

<400> 2511

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gcattacgcc caggacgcgt tgctggcctg gcggagatcg tcgtcaacgg tcaacctttt
240
accgtcactg acgccactga ggatgaacta gctctcactg cttgggctcg tatectcttc
300
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360
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420
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480
accgtgcata gcgcctcaa cgatgccggg atctcatcgg tggccacatt gtacggcttt
540
atgtccggac agatccccgc tgaggaacac atcccggtcg atctagctat gatcattgag
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660
gac
663

<210> 2512
 <211> 221
 <212> PRT
 <213> Homo sapiens

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 20 25 30
 Asn Glu Gln Asp Leu Gln Val Leu Pro Val Ile Ala His Val Gly Tyr
 35 40 45
 Pro Gln Ala Ala Asp Glu Tyr Tyr Gln Leu Leu Leu Ala Leu Arg Pro
 50 55 60
 Gly Arg Val Ala Gly Leu Ala Glu Ile Val Val Asn Gly Gln Pro Phe
 65 70 75 80
 Thr Val Thr Asp Ala Thr Glu Asp Glu Leu Ala Leu Thr Ala Trp Ala
 85 90 95
 Arg Ile Leu Leu Glu Gly Thr Pro Ile Ala Met Asp Gly Ser Trp Gln
 100 105 110
 Leu His Arg Arg Arg Ala Ala Pro Glu Pro Val Arg Phe Ala Lys Arg
 115 120 125
 Phe Gly Gly Glu Gln Ser Asn Thr Ser Ile Met Val Gly Asp Ala Ile
 130 135 140
 Ile Ile Lys Met Phe Arg Arg Leu Glu Pro Gly Asp Asn Leu Asp Ile
 145 150 155 160
 Thr Val His Ser Ala Leu Asn Asp Ala Gly Ile Ser Ser Val Ala Thr
 165 170 175
 Leu Tyr Gly Phe Met Ser Gly Gln Ile Pro Ala Glu Glu His Ile Pro
 180 185 190
 Val Asp Leu Ala Met Ile Ile Glu Arg Leu Pro Gln Pro Arg Asp Gly
 195 200 205
 Trp Glu Leu Ile Thr Ala Lys Ala Val Asp Leu Val Asp
 210 215 220

<210> 2513
 <211> 368
 <212> DNA
 <213> Homo sapiens

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 120
 gacctgaagt tctgcatgga tggagttcag actgctttga ggagtgaaga ttatgagcag
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 gctgcagcac atattcatcg ctacttgtgc ctggacaagt cggtcattga gctcagccga
 240
 cagggcaaag agggtcagca tccgaaactg gagcatgatt gatgccaacc tgaaattgct
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368

<210> 2514
<211> 93
<212> PRT
<213> Homo sapiens

<400> 2514
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Ser Lys Val Arg Gln Leu Asp Leu Ala Lys Asn Arg Leu Tyr Gln Ala
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Ile Gln Arg Ala Asp Asp Ile Leu Asp Leu Lys Phe Cys Met Asp Gly
35 40 45
Val Gln Thr Ala Leu Arg Ser Glu Asp Tyr Glu Gln Ala Ala Ala His
50 55 60
Ile His Arg Tyr Leu Cys Leu Asp Lys Ser Val Ile Glu Leu Ser Arg
65 70 75 80
Gln Gly Lys Glu Gly Gln His Pro Lys Leu Glu His Asp
85 90

<210> 2515
<211> 351
<212> DNA
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351

<210> 2516
<211> 98
<212> PRT
<213> Homo sapiens

<400> 2516
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20 25 30
Pro Glu Gly Gly Arg Lys Ser Leu Leu Pro Pro Ser Pro Thr Gly Asn.
35 40 45
Ala Ala Gly Gly Leu Arg Glu Ala Thr Gln Trp Gly Ala Leu Gly Ala

50 55 60
 Gly Gly Gln Thr Met Gly Gln His Thr Pro Ser Ala Pro Leu Gln Tyr
 65 70 75 80
 Gln His Ser Arg Pro Thr His Leu Gly Pro Trp Ser Pro Gly Asp Leu
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 Thr Arg

<210> 2517
 <211> 356
 <212> DNA
 <213> Homo sapiens

<400> 2517
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<210> 2518
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 2518
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 20 25 30
 Pro Asn Pro Met Gly Leu Phe Ser Ser Pro Asn Leu Ala Gly Leu Ala
 35 40 45
 Glu Ala Thr His Ser Leu Gly Thr Glu Leu Gln Gly Ala Gly Ser Leu
 50 55 60
 Ser Arg Lys Arg Pro Val Leu Ser Gly Gln Cys Leu Thr Pro Ala Pro
 65 70 75 80
 Pro Ser Gln Ala Ser Ser Ser His Leu Pro Gln Ser Phe Pro Ser Arg
 85 90 95
 Pro Ser Ser Thr Gly Gln Thr
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<210> 2519
 <211> 830
 <212> DNA
 <213> Homo sapiens

<400> 2519

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 660
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 720
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<210> 2520

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2520

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 35 40 45
 Gly Trp Gly Val Ala Gly Arg Gly Ser Ser Arg Pro Glu Ser Gln Ser
 50 55 60
 Arg Trp Arg Ala Ala Ser Thr Arg Phe Leu Leu Val Gly Leu Arg Gln
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<210> 2521

<211> 4291

<212> DNA

<213> Homo sapiens

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<210> 2522

<211> 952

<212> PRT

<213> Homo sapiens

<400> 2522

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 Ala Pro Leu Ala Leu Val Gly Val Thr Leu Leu Leu Ala Ala Pro Pro
 35 40 45
 Cys Ser Gly Ala Ala Thr Pro Thr Pro Ser Leu Pro Pro Pro Pro Ala
 50 55 60
 Asn Asp Ser Asp Thr Ser Thr Gly Gly Cys Gln Gly Ser Tyr Arg Cys

65					70					75				80	
Gln	Pro	Gly	Val	Leu	Leu	Pro	Val	Trp	Glu	Pro	Asp	Asp	Pro	Ser	Leu
				85					90					95	
Gly	Asp	Lys	Ala	Ala	Arg	Ala	Val	Val	Tyr	Phe	Val	Ala	Met	Val	Tyr
			100					105					110		
Met	Phe	Leu	Gly	Val	Ser	Ile	Ile	Ala	Asp	Arg	Phe	Met	Ala	Ala	Ile
		115					120					125			
Glu	Val	Ile	Thr	Ser	Lys	Glu	Lys	Glu	Ile	Thr	Ile	Thr	Lys	Ala	Asn
		130				135					140				
Gly	Glu	Thr	Ser	Val	Gly	Thr	Val	Arg	Ile	Trp	Asn	Glu	Thr	Val	Ser
145					150					155				160	
Asn	Leu	Thr	Leu	Met	Ala	Leu	Gly	Ser	Ser	Ala	Pro	Glu	Ile	Leu	Leu
				165					170					175	
Ser	Val	Ile	Glu	Val	Cys	Gly	His	Asn	Phe	Gln	Ala	Gly	Glu	Leu	Gly
		180						185					190		
Pro	Gly	Thr	Ile	Val	Gly	Ser	Ala	Ala	Phe	Asn	Met	Phe	Val	Val	Ile
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Ala	Val	Cys	Ile	Tyr	Val	Ile	Pro	Ala	Gly	Glu	Ser	Arg	Lys	Ile	Lys
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His	Leu	Arg	Val	Phe	Phe	Val	Thr	Ala	Ser	Trp	Ser	Ile	Phe	Ala	Tyr
225					230					235				240	
Val	Trp	Leu	Tyr	Leu	Ile	Leu	Ala	Val	Phe	Ser	Pro	Gly	Val	Val	Gln
				245					250					255	
Val	Trp	Glu	Ala	Leu	Leu	Thr	Leu	Val	Phe	Phe	Pro	Val	Cys	Val	Val
			260					265					270		
Phe	Ala	Trp	Met	Ala	Asp	Lys	Arg	Leu	Leu	Phe	Tyr	Lys	Tyr	Val	Tyr
		275					280					285			
Lys	Arg	Tyr	Arg	Thr	Asp	Pro	Arg	Ser	Gly	Ile	Ile	Ile	Gly	Ala	Glu
		290				295					300				
Gly	Asp	Pro	Pro	Lys	Ser	Ile	Glu	Leu	Asp	Gly	Thr	Phe	Val	Gly	Ala
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Glu	Ala	Pro	Gly	Glu	Leu	Gly	Gly	Leu	Gly	Pro	Gly	Pro	Ala	Glu	Ala
				325					330					335	
Arg	Glu	Leu	Asp	Ala	Ser	Arg	Arg	Glu	Val	Ile	Gln	Ile	Leu	Lys	Asp
			340					345					350		
Leu	Lys	Gln	Lys	His	Pro	Asp	Lys	Asp	Leu	Glu	Gln	Leu	Val	Gly	Ile
		355					360					365			
Ala	Asn	Tyr	Tyr	Ala	Leu	Leu	His	Gln	Gln	Lys	Ser	Arg	Ala	Phe	Tyr
		370				375					380				
Arg	Ile	Gln	Ala	Thr	Arg	Leu	Met	Thr	Gly	Ala	Gly	Asn	Val	Leu	Arg
385					390					395				400	
Arg	His	Ala	Ala	Asp	Ala	Ser	Arg	Arg	Ala	Ala	Pro	Ala	Glu	Gly	Ala
				405					410					415	
Gly	Glu	Asp	Glu	Asp	Asp	Gly	Ala	Ser	Arg	Ile	Phe	Phe	Glu	Pro	Ser
			420					425					430		
Leu	Tyr	His	Cys	Leu	Glu	Asn	Cys	Gly	Ser	Val	Leu	Leu	Ser	Val	Thr
		435					440					445			
Cys	Gln	Gly	Gly	Glu	Gly	Asn	Ser	Thr	Phe	Tyr	Val	Asp	Tyr	Arg	Thr
		450				455					460				
Glu	Asp	Gly	Ser	Ala	Lys	Ala	Gly	Ser	Asp	Tyr	Glu	Tyr	Ser	Glu	Gly
465					470					475				480	
Thr	Leu	Val	Phe	Lys	Pro	Gly	Glu	Thr	Gln	Lys	Glu	Leu	Arg	Ile	Gly
				485					490					495	
Ile	Ile	Asp	Asp	Asp	Ile	Phe	Glu	Glu	Asp	Glu	His	Phe	Phe	Val	Arg

500	505	510
Leu Leu Asn Leu Arg Val Gly Asp	Ala Gln Gly Met Phe Glu Pro Asp	
515	520	525
Gly Gly Gly Arg Pro Lys Gly Arg Leu Val Ala Pro Leu Leu Ala Thr		
530	535	540
Val Thr Ile Leu Asp Asp Asp His Ala Gly Ile Phe Ser Phe Gln Asp		
545	550	555
Arg Leu Leu His Val Ser Glu Cys Met Gly Thr Val Asp Val Arg Val		
565	570	575
Val Arg Ser Ser Gly Ala Arg Gly Thr Val Arg Leu Pro Tyr Arg Thr		
580	585	590
Val Asp Gly Thr Ala Arg Gly Gly Val His Tyr Glu Asp Ala Cys		
595	600	605
Gly Glu Leu Glu Phe Gly Asp Asp Glu Thr Met Lys Thr Leu Gln Val		
610	615	620
Lys Ile Val Asp Asp Glu Glu Tyr Glu Lys Lys Asp Asn Phe Phe Ile		
625	630	635
Glu Leu Gly Gln Pro Gln Trp Leu Lys Arg Gly Ile Ser Ala Leu Leu		
645	650	655
Leu Asn Gln Gly Asp Gly Asp Arg Lys Leu Thr Ala Glu Glu Glu Glu		
660	665	670
Ala Arg Arg Ile Ala Glu Met Gly Lys Pro Val Leu Gly Glu Asn Cys		
675	680	685
Arg Leu Glu Val Ile Ile Glu Glu Ser Tyr Asp Phe Lys Asn Thr Val		
690	695	700
Asp Lys Leu Ile Lys Lys Thr Asn Leu Ala Leu Val Ile Gly Thr His		
705	710	715
Ser Trp Arg Glu Gln Phe Leu Glu Ala Ile Thr Val Ser Ala Gly Asp		
725	730	735
Glu Glu Glu Glu Glu Asp Gly Ser Arg Glu Glu Arg Leu Pro Ser Cys		
740	745	750
Phe Asp Tyr Val Met His Phe Leu Thr Val Phe Trp Lys Val Leu Phe		
755	760	765
Ala Cys Val Pro Pro Thr Glu Tyr Cys His Gly Trp Ala Cys Phe Gly		
770	775	780
Val Ser Ile Leu Val Ile Gly Leu Leu Thr Ala Leu Ile Gly Asp Leu		
785	790	795
Ala Ser His Phe Gly Cys Thr Val Gly Leu Lys Asp Ser Val Asn Ala		
805	810	815
Val Val Phe Val Ala Leu Gly Thr Ser Ile Pro Asp Thr Phe Ala Ser		
820	825	830
Lys Val Ala Ala Leu Gln Asp Gln Cys Ala Asp Ala Ser Ile Gly Asn		
835	840	845
Val Thr Gly Ser Asn Ala Val Asn Val Phe Leu Gly Leu Gly Val Ala		
850	855	860
Trp Ser Val Ala Ala Val Tyr Trp Ala Val Gln Gly Arg Pro Phe Glu		
865	870	875
Val Arg Thr Gly Thr Leu Ala Phe Ser Val Thr Leu Phe Thr Val Phe		
885	890	895
Ala Phe Val Gly Ile Ala Val Leu Leu Tyr Arg Arg Arg Pro His Ile		
900	905	910
Gly Gly Glu Leu Gly Gly Pro Arg Gly Pro Lys Leu Ala Thr Thr Ala		
915	920	925
Leu Phe Leu Gly Leu Trp Leu Leu Tyr Ile Leu Phe Ala Ser Leu Glu		

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Ala Tyr Cys His Ile Arg Gly Phe
945 950

<210> 2523
<211> 392
<212> DNA
<213> Homo sapiens

<400> 2523
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120
atggaggctt tggagcatgc gttaacgact gcagggcgaa ttcattgaaa ccagttaatt
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240
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300
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392

<210> 2524
<211> 130
<212> PRT
<213> Homo sapiens

<400> 2524
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Val Val Asp Val Phe Ser Arg Lys Ile Val Gly Val Ala Thr Arg Ser
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Thr Met Arg Thr Asp Ala Leu Pro Met Glu Ala Leu Glu His Ala Leu
35 40 45
Thr Thr Ala Gly Arg Ile His Gly Asn Gln Leu Ile His His Ser Asp
50 55 60
Arg Gly Ser Gln Tyr Val Ser Leu Lys Tyr Ser Thr Ala Leu Ala Glu
65 70 75 80
Ser Gly Ile Arg Pro Ser Val Gly Thr Val Gly Asp Ser Tyr Asp Asn
85 90 95
Ala Leu Ala Glu Thr Val Asn Gly Leu Tyr Lys Ala Glu Leu Ile His
100 105 110
Ala Gln Gly Pro Trp Thr Ser Val Gly Glu Val Glu Leu Ala Thr Leu
115 120 125
Arg Xaa
130

<210> 2525
<211> 378
<212> DNA
<213> Homo sapiens

<400> 2525

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 120
 atcgtgcgc tacgcaccaa cgtggtcggc aagatgttgg tcagcggcga gccccgnaa
 180
 tgattcatat ctccgatatc agcagcacag gggcgtcatt ccgctctgca catcggttg
 240
 gaagtcagcg gtgcgcccgc acgcctgcga ttctgggtga agacgcgcga ctaccattca
 300
 gaactgggtgg ccgcaacact cattcgcagc gagaagcccg ccgatttgcc caacacctat
 360
 caatacggcg tggaattc
 378

<210> 2526

<211> 111

<212> PRT

<213> Homo sapiens

<400> 2526

Met	Ala	Val	Cys	Arg	Ile	Pro	Phe	Glu	Tyr	Val	Val	Leu	Ser	Pro	Pro
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Arg	Glu	Ser	Arg	Thr	Ala	Arg	Cys	Ala	Asn	Arg	Cys	Ala	Thr	His	Gln
			20					25					30		
Arg	Gly	Arg	Gln	Asp	Val	Gly	Gln	Arg	Arg	Ala	Pro	Xaa	Met	Ile	His
			35					40					45		
Ile	Ser	Asp	Ile	Ser	Thr	Thr	Gly	Ala	Ser	Phe	Arg	Ser	Ala	His	Arg
			50				55					60			
Leu	Gly	Ser	Gln	Arg	Cys	Ala	Arg	Thr	Pro	Ala	Ile	Ser	Gly	Glu	Asp
					70					75				80	
Ala	Arg	Leu	Pro	Phe	Arg	Thr	Gly	Gly	Arg	Asn	Thr	His	Ser	Gln	Arg
					85					90				95	
Glu	Ala	Arg	Arg	Phe	Ala	Gln	His	Leu	Ser	Ile	Arg	Arg	Gly	Ile	
					100					105				110	

<210> 2527

<211> 305

<212> DNA

<213> Homo sapiens

<400> 2527

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 240
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cgcgt
305

<210> 2528
<211> 101
<212> PRT
<213> Homo sapiens

<400> 2528
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Ser Lys Glu Gln Gln Ile Gln Arg Asp Asp Leu Gly Ala Ser Pro Gln
20 25 30
Ser Ser Ser Gln Pro Asp His Gly Arg Leu Ser Pro Pro Glu Ala Pro
35 40 45
Asp Arg Pro Thr Ile Ser Thr Ala Ser Glu Thr Ser Val Tyr Val Thr
50 55 60
Trp Ile Pro Arg Gly Asn Gly Gly Phe Pro Ile Gln Ser Phe Arg Val
65 70 75 80
Glu Tyr Lys Lys Leu Lys Lys Val Gly Asp Trp Ile Leu Ala Thr Ser
85 90 95
Ala Ile Pro Pro Arg
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<210> 2529
<211> 387
<212> DNA
<213> Homo sapiens

<400> 2529
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120
gtgaagtgtc acccggttg ctgcggcgtg tctccgcgt aacacgtgta taccgggtca
180
gccatggcgg cggctgtgg gaaggctcct gcgtatggct ttgccatccg ggacccgggc
240
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360
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387

<210> 2530
<211> 121
<212> PRT
<213> Homo sapiens

<400> 2530
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1 5 10 15
Trp Lys Asp Thr Asn Val His Gly Pro Gly Tyr Leu Trp Pro Ser Ser


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Ala Gln Lys Pro Thr Pro Ala Glu Gln Ser Pro Gly Pro Gly Trp Gln
      35      40      45
Ser His Thr Gln Glu Pro Ser Gln Gln Pro Pro Pro Trp Leu Ser Arg
      50      55      60
Tyr Thr Arg Val Thr Ala Glu Thr Arg Arg Ser Lys Pro Gly Asp Thr
      65      70      75      80
Ser His Gln Gly Asp Cys Val Gly Glu Arg Ala Ser Arg Pro Leu Gly
      85      90      95
Gly His Gly Gly His Arg Glu Arg Leu Gln Trp Gln Ser Arg Pro Gly
      100      105      110
Asp Arg Asp Pro Pro Arg Gly Asp Ala
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<210> 2531

<211> 396

<212> DNA

<213> Homo sapiens

<400> 2531

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120
ctcatcagca gccctggaga tgacaaagat agtgtgtgagg gggaacagac cttcgtcatc
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240
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300
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396

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<210> 2532

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2532

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Met Thr Arg Leu Asn Pro Lys Ser Leu Gln Leu Cys Val Ile Ser Ser
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Ser Ser Val Lys Asp Met Leu Ala Phe Leu Phe Leu Pro Asp Ile Pro
      35      40      45
Glu Ser Arg Glu Leu Ser Cys Asn Ala Ser Asn Pro Leu Gly Leu Asn
      50      55      60
Ser Phe Pro Arg Glu Thr Arg Ser Thr Val Arg Ser Gln Gly Pro Pro
      65      70      75      80
Cys Leu Ala Arg Ala Ser Leu Leu Ser Arg Gln Gly Pro Ala Ala Ser
      85      90      95
Thr His Val Gln Gly Lys Glu Gly Arg

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100

105

<210> 2533
 <211> 495
 <212> DNA
 <213> Homo sapiens

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 180
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 300
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 360
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 480
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<210> 2534
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 2534
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 20 25 30
 Leu Gln Ala Asp Gly Gln Gly Gln Arg Arg Tyr Arg Gly Leu Leu His
 35 40 45
 Cys Met Val Thr Ser Val Arg Glu Glu Gly Pro Arg Val Leu Phe Lys
 50 55 60
 Gly Leu Val Leu Asn Cys Cys Arg Ala Phe Pro Val Asn Met Val Val
 65 70 75 80
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 85 90 95

<210> 2535
 <211> 1904
 <212> DNA
 <213> Homo sapiens

<400> 2535
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120
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180
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240
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300
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360
ttcctcacag atctagaaga cccaccttg ggggagatcg aggtcatgat tgcagagccc
420
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720
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840
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900
gccagttccc ttctcccctc ccggccaaac ccagaccag actctaggaa gctggaatgg
960
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1020
tggaacatgg atgggagtg acaggccttt ctcttagag gccagagggt ctgccctggc
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1260
gagtgtggcc tggcccoctca acctagtgtc cgtcctcctc tctcctggag ccagtcttga
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aaagctcagg gggcactgag gaagcagagg ccccttgggg gtgccctcct gaagagagcg
1440
tcaggccatc agctctgtcc ctctggtgct ccacgtctg ttctcacc tccatctctg
1500
ggagcagctg cacctgactg gccacgggg ggcagtggag gcacaggctc aggggtggccg
1560
ggctacctgg caccctatgg cttacaaagt agagtggcc cagtttcctt ccacctgagg
1620
ggagcactct gactcctaac agtcttctt gccctgccat catctggggg ggtggctgt
1680

caagaaaggc cgggcatgct ttctaaacac agccacagga ggcttgtagg gcattctcca
 1740
 ggtggggaaa cagtcttaga taagtaaggt gacttgcccta aggcctccca gcacccttga
 1800
 tcttgagtc tcacagcaga ctgcatgtga acaactggaa ccgaaaacat gcctcagtat
 1860
 aaaacaaaca ttataaaacg aaaaaaaaaa aaaaaaaaag tact
 1904

<210> 2536

<211> 207

<212> PRT

<213> Homo sapiens

<400> 2536

Met	Arg	Leu	Asn	Gln	Asn	Thr	Leu	Leu	Leu	Gly	Lys	Lys	Val	Val	Leu
1			5					10					15		
Val	Pro	Tyr	Thr	Ser	Glu	His	Val	Pro	Ser	Arg	Tyr	His	Glu	Trp	Met
			20					25					30		
Lys	Ser	Glu	Glu	Leu	Gln	Arg	Leu	Thr	Ala	Ser	Glu	Pro	Leu	Thr	Leu
			35				40					45			
Glu	Gln	Glu	Tyr	Ala	Met	Gln	Cys	Ser	Trp	Gln	Glu	Asp	Ala	Asp	Lys
			50			55				60					
Cys	Thr	Phe	Ile	Val	Leu	Asp	Ala	Glu	Lys	Trp	Gln	Ala	Gln	Pro	Gly
65					70				75					80	
Ala	Thr	Glu	Glu	Ser	Cys	Met	Val	Gly	Asp	Val	Asn	Leu	Phe	Leu	Thr
				85				90					95		
Asp	Leu	Glu	Asp	Pro	Thr	Leu	Gly	Glu	Ile	Glu	Val	Met	Ile	Ala	Glu
			100				105						110		
Pro	Ser	Cys	Arg	Gly	Lys	Gly	Leu	Gly	Thr	Glu	Ala	Val	Leu	Ala	Met
			115				120					125			
Leu	Ser	Tyr	Gly	Val	Thr	Thr	Leu	Gly	Leu	Thr	Lys	Phe	Glu	Ala	Lys
			130				135				140				
Ile	Gly	Gln	Gly	Asn	Glu	Pro	Ser	Ile	Arg	Met	Phe	Gln	Lys	Leu	His
145					150				155					160	
Phe	Glu	Gln	Val	Ala	Thr	Ser	Ser	Val	Phe	Gln	Glu	Val	Thr	Leu	Arg
			165					170					175		
Leu	Thr	Val	Ser	Glu	Ser	Glu	His	Gln	Trp	Leu	Leu	Glu	Gln	Thr	Ser
			180				185					190			
His	Val	Glu	Glu	Lys	Pro	Tyr	Arg	Asp	Gly	Ser	Ala	Glu	Pro	Cys	
			195				200					205			

<210> 2537

<211> 509

<212> DNA

<213> Homo sapiens

<400> 2537

acgcgttctc gtaaggacaa gcttgacgcc gaggtgcatg ccggtgaagg ccccccggg
 60
 gatgtcatcg tgctgcgggtt ttccggagcc atggcgaagc gtctgcctc agttatcctt
 120
 ccgctgctac tgctggactc ccccgctcatt gcgtgggtggc ccttctccgg ccctgacaac
 180

ctcgccctcgg accccatcgg agcccttgcg gaccgccgca tcaccgactc ggcagctgac
 240
 aaagatccgt gcaaagccct catacgccgt gcggctcacc taaccgaggg tgactccgac
 300
 ctgtgttggg ctgcgaccac cagctggaga gccctagctg cagcagcttt ggatcaacat
 360
 ccagcgaccg tcaagttcgc tcgggtagag tcagccgccg gtaatgcgcc ggcgatgctg
 420
 ctggcagcct ggctaggatt gcgtctcggc gtcccggtcg agcgggtgac aaccgacgcg
 480
 cccggcatct ccgcgatcgt catgtcgac
 509

<210> 2538

<211> 169

<212> PRT

<213> Homo sapiens

<400> 2538

Thr	Arg	Ser	Arg	Lys	Asp	Lys	Leu	Asp	Ala	Glu	Val	His	Ala	Gly	Glu
1				5					10					15	
Gly	Thr	Pro	Gly	Asp	Val	Ile	Val	Leu	Arg	Phe	Ser	Gly	Ala	Met	Ala
			20					25					30		
Lys	Arg	Pro	Ala	Ser	Val	Ile	Leu	Pro	Leu	Leu	Leu	Ser	Asp	Ser	Pro
			35				40					45			
Val	Ile	Ala	Trp	Trp	Pro	Phe	Ser	Gly	Pro	Asp	Asn	Leu	Ala	Ser	Asp
	50					55				60					
Pro	Ile	Gly	Ala	Leu	Ala	Asp	Arg	Arg	Ile	Thr	Asp	Ser	Ala	Ala	Asp
65				70					75				80		
Lys	Asp	Pro	Cys	Lys	Ala	Leu	Ile	Arg	Arg	Ala	Ala	His	Leu	Thr	Glu
			85					90					95		
Gly	Asp	Ser	Asp	Leu	Cys	Trp	Ala	Arg	Thr	Thr	Ser	Trp	Arg	Ala	Leu
			100					105					110		
Ala	Ala	Ala	Ala	Leu	Asp	Gln	His	Pro	Ala	Thr	Val	Lys	Phe	Ala	Arg
			115				120					125			
Val	Glu	Ser	Ala	Ala	Gly	Asn	Ala	Pro	Ala	Met	Leu	Leu	Ala	Ala	Trp
	130					135				140					
Leu	Gly	Leu	Arg	Leu	Gly	Val	Pro	Val	Glu	Arg	Val	Thr	Thr	Asp	Ala
145				150					155					160	
Pro	Gly	Ile	Ser	Ala	Ile	Val	Met	Ser							
				165											

<210> 2539

<211> 453

<212> DNA

<213> Homo sapiens

<400> 2539

aagcttctac tgccgcgagc acgtcgtcca ccgtcgaggt catggttcta gtttgccgcg
 60
 tcgcggcatg acccgaggat agtgacgtgg gacaatggct acgtgcgttt tctcaacgag
 120
 cagccgaact acgacctgac gtatgacgac gtcttcatgg caccaaaccg ttcctcggtg
 180

ggggtcccga tgaacgtcga cctcactgca acagacgggc taggcactcc tctgcccctc
 240
 gtagtggcca atatgaccgc aatttccgga cgtcgcattg cagagaccat cgccaggcgc
 300
 ggaggcattg ctgttctgcc ccaagatatc ccggcggatt tcgtcgcccg gtccattcgg
 360
 cgcgtcaaag atgcgcatac tcgattcgac accccagtca ccgtcaaccc gacaacgact
 420
 gtcggtgagg ccatgaactt gctcaacaag cgc
 453

<210> 2540

<211> 134

<212> PRT

<213> Homo sapiens

<400> 2540

Phe Ala Ala Ser Arg His Asp Pro Arg Ile Val Thr Trp Asp Asn Gly
 1 5 10 15
 Tyr Val Arg Phe Leu Asn Glu Gln Pro Asn Tyr Asp Leu Thr Tyr Asp
 20 25 30
 Asp Val Phe Met Ala Pro Asn Arg Ser Ser Val Gly Ser Arg Met Asn
 35 40 45
 Val Asp Leu Thr Ser Thr Asp Gly Leu Gly Thr Pro Leu Pro Leu Val
 50 55 60
 Val Ala Asn Met Thr Ala Ile Ser Gly Arg Arg Met Ala Glu Thr Ile
 65 70 75 80
 Ala Arg Arg Gly Gly Ile Ala Val Leu Pro Gln Asp Ile Pro Ala Asp
 85 90 95
 Phe Val Ala Arg Ser Ile Arg Arg Val Lys Asp Ala His Thr Arg Phe
 100 105 110
 Asp Thr Pro Val Thr Val Asn Pro Thr Thr Thr Val Gly Glu Ala Met
 115 120 125
 Asn Leu Leu Asn Lys Arg
 130

<210> 2541

<211> 564

<212> DNA

<213> Homo sapiens

<400> 2541

accggtctcc cacggagttc tggttctcga ggtactgcac tgtatacaac tctaaatgca
 60
 ccctgcatgg aaccattgac agggcacacg cagtctacat gtatcccagg ttttatgctc
 120
 acagagcctg caatactccg tgtctggaat acgttatttg ctgcacacct ccagaggaa
 180
 catgtaacgt ctgtgtaaca tgctatcctg cacacatctg aaagaatctg tgtacacaac
 240
 actattatgc tgtgcacaca tttcctcata ttctgtgtag agagcacctc atttgtact
 300
 caaatattcg gcttcataa caagttacat tgctcacatc ttaaaatatt cattacacgt
 360

gaaaccaccg catggtaccg acatccttct ggaatgtccc gcacagaggc tgatatatgt
 420
 gcacagtctt cactgttctg cgtgcccagc ccctcacact ggacgcccac ctcacactct
 480
 tctgccaagg gagactttgg ttctcccctt cctgtgctg gctgtgcggg ccacagtctt
 540
 ctgcacgcca gcagcatgac gcgt
 564

<210> 2542
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2542
 Met Leu Cys Thr His Phe Leu Ile Phe Cys Val Glu Ser Thr Ser Phe
 1 5 10 15
 Cys Thr Gln Ile Phe Gly Phe His Asn Lys Leu His Cys Ser His Leu
 20 25 30
 Lys Ile Phe Ile Thr Arg Glu Thr Ala Trp Tyr Arg His Pro Ser
 35 40 45
 Gly Met Ser Arg Thr Glu Ala Asp Ile Cys Ala Gln Phe Ser Leu Phe
 50 55 60
 Cys Val Pro Ser Pro Ser His Trp Thr Pro Thr Ser His Ser Ser Ala
 65 70 75 80
 Lys Gly Asp Phe Gly Ser Pro Leu Pro Cys Ala Gly Cys Ala Gly His
 85 90 95
 Ser Pro Leu His Ala Ser Ser Met Thr Arg
 100 105

<210> 2543
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 2543
 cgcttgaagg gggcggggaa aatggaatgg gggggaaggg cgcggtggg gacatgctgg
 60
 aacgtgccca tgctttctgc accacactgg atgactgaag gggaagggaac gagcgtctta
 120
 ccgctcctga tgagattttt gtttttgcct aacaaagaaa tgtgtatgaa tgcacgtctg
 180
 tttgcagggg cagggaggag gagggtcctt ggaatagctg ccgacaacag ctggaactcc
 240
 tgtctgggtc cccagctgg gctagagagg gcagtgatca tctgtccact ggacaggaag
 300
 gtttgcaaag ggctgtttgc ttactgggtc ccaattttta gccttctgaa gcccctgtcc
 360
 aatggggccc agcaggcagc agtgctg
 387

<210> 2544
 <211> 122
 <212> PRT

<213> Homo sapiens

<400> 2544

```

Met Glu Trp Gly Gly Arg Ala Arg Val Gly Thr Cys Trp Asn Val Pro
 1           5           10           15
Met Leu Ser Ala Pro His Trp Met Thr Glu Gly Glu Gly Thr Ser Val
 20           25           30
Leu Pro Leu Leu Met Arg Phe Leu Phe Leu Pro Asn Lys Glu Met Cys
 35           40           45
Met Asn Ala Arg Leu Phe Ala Gly Ala Gly Arg Arg Arg Val Leu Gly
 50           55           60
Ile Ala Ala Asp Asn Ser Trp Asn Ser Cys Leu Gly Pro Pro Ala Gly
 65           70           75           80
Leu Glu Arg Ala Val Ile Ile Cys Pro Leu Asp Arg Lys Val Cys Lys
 85           90           95
Gly Leu Phe Ala Tyr Trp Val Pro Ile Phe Ser Leu Leu Lys Pro Leu
 100          105          110
Ser Asn Gly Ala Gln Gln Ala Ala Val Leu
 115          120

```

<210> 2545

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2545

```

gcgattattt tcgtgctgcc cggacttata atggctcggc ggtggtcagg tttcccgta
60
tggaacaccc tcgtatctg tctagtcggc ggcaccccg gcgttatgta ctgcattccg
120
ctgcgtcggg cctcgtgac aggcctcgat cttccctacc cggagggcgt cgcaggagct
180
gaggtgctca aagtaggcga ttccgtggt gccgccgagg ctaacaaggt gggctctgcga
240
gtcatcatcg tcggttctgt ggtctctgca gcgtacgccc tgttgctgga tcttaagctt
300
gtgaagtcgg cgctgaccaa gcctttcaag acgggc
336

```

<210> 2546

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2546

```

Ala Ile Ile Phe Val Leu Pro Gly Leu Ile Met Val Gly Trp Trp Ser
 1           5           10           15
Gly Phe Pro Tyr Trp Thr Thr Leu Ala Ile Cys Leu Val Gly Gly Ile
 20           25           30
Leu Gly Val Met Tyr Ser Ile Pro Leu Arg Arg Ala Leu Val Thr Gly
 35           40           45
Ser Asp Leu Pro Tyr Pro Glu Gly Val Ala Gly Ala Glu Val Leu Lys
 50           55           60
Val Gly Asp Ser Ala Gly Ala Ala Glu Ala Asn Lys Val Gly Leu Arg

```



```

65          70          75          80
Val Ile Ile Val Gly Ser Val Val Ser Ala Ala Tyr Ala Leu Leu Ser
          85          90          95
Asp Leu Lys Leu Val Lys Ser Ala Leu Thr Lys Pro Phe Lys Thr Gly
          100          105          110

```

<210> 2547
 <211> 556
 <212> DNA
 <213> Homo sapiens

```

<400> 2547
acgcgtgcac acacacacac gcaggcgtac acgctcacaa gtgcacacac acatatgagt
60
ttccacaca tctcaccata tcaactttctc tttacttttt aaagacaggg cacttgccct
120
tatggccaat aatattatgc ccaagctaca acattccgag tcaatcacia aggttataaa
180
cttcatttga actgaagacc acctgtaagc acgcagctca aatgtttctca cctagaaatt
240
caagtttgtt ttggaaagtg gacttaacgg tcaaagaaaa aggcctggcc aacttcagag
300
agggacaccc agccctgcta cgttgcgtgt cattatgtgg tgctgtgcta tccatagaga
360
aagaggagat gaaaaagatt ctacaaagag agatcaaact gcaagaaagc acaaagattt
420
catcaccaca atatgaaggc ctcccttgga taaatgactt ttttaggtcc caataagaaa
480
taccatctat tctatctgga attattttat tagcttcaaa ttttattcta agattcatat
540
tatcagatca tctaga
556

```

<210> 2548
 <211> 106
 <212> PRT
 <213> Homo sapiens

```

<400> 2548
Met Asn Leu Arg Ile Lys Phe Glu Ala Asn Lys Ile Ile Pro Asp Arg
1          5          10          15
Ile Asp Gly Ile Ser Tyr Trp Asp Leu Lys Lys Ser Phe Ile Pro Arg
          20          25          30
Arg Pro Ser Tyr Cys Gly Asp Glu Ile Phe Val Leu Ser Cys Ser Leu
          35          40          45
Ile Ser Leu Cys Arg Ile Phe Phe Ile Ser Ser Phe Ser Met Asp Ser
          50          55          60
Thr Ala Pro His Asn Asp Thr Gln Arg Ser Arg Ala Gly Cys Pro Ser
65          70          75          80
Leu Lys Leu Ala Arg Pro Phe Ser Leu Thr Val Lys Ser Thr Phe Gln
          85          90          95
Thr Gln Leu Glu Phe Leu Gly Glu Asn Ile
          100          105

```

<210> 2549
<211> 435
<212> DNA
<213> Homo sapiens

<400> 2549
nnccagcctc tctccgaccg cgtacgtatt gaatttgata aagaagccaa cacggttggt
60
atcgatgata atggtgtcgg catgtctcgt gaagaagcca ttacaaactt aggtacgatt
120
gctaaatcgg gcacctcttc tttcttagag caattgagtg gcgatcagaa aaaagacagc
180
caacttattg gtcaattcgg tgtaggcttt tactctgctt tcatcgttgc tgataaagta
240
acagtagaaa cacgtcgcgc aggtgcgacg gaaaatgaag cggttcgtg ggtatctgat
300
ggtctcgtg aatttactat tgagacgac gataaagcga ctcgtggtac acgcattact
360
ttgcatctga aagcagatga aaaagatttc gcagacaact tccgtctacg ttcattagta
420
acaaaatatt ctgat
435

<210> 2550
<211> 145
<212> PRT
<213> Homo sapiens

<400> 2550
Xaa Gln Pro Leu Ser Asp Arg Val Arg Ile Glu Phe Asp Lys Glu Ala
1 5 10 15
Asn Thr Val Val Ile Asp Asp Asn Gly Val Gly Met Ser Arg Glu Glu
20 25 30
Ala Ile Thr Asn Leu Gly Thr Ile Ala Lys Ser Gly Thr Ser Ser Phe
35 40 45
Leu Glu Gln Leu Ser Gly Asp Gln Lys Lys Asp Ser Gln Leu Ile Gly
50 55 60
Gln Phe Gly Val Gly Phe Tyr Ser Ala Phe Ile Val Ala Asp Lys Val
65 70 75 80
Thr Val Glu Thr Arg Arg Ala Gly Ala Thr Glu Asn Glu Ala Val Arg
85 90 95
Trp Val Ser Asp Gly Ser Gly Glu Phe Thr Ile Glu Thr Ile Asp Lys
100 105 110
Ala Thr Arg Gly Thr Arg Ile Thr Leu His Leu Lys Ala Asp Glu Lys
115 120 125
Asp Phe Ala Asp Asn Phe Arg Leu Arg Ser Leu Val Thr Lys Tyr Ser
130 135 140
Asp
145

<210> 2551
<211> 403
<212> DNA
<213> Homo sapiens

<400> 2551

nngccggcca gcctcacatc agtctctccg ccccggggaa ggctcagcac tttaaatacga
 60
 ggactccact tctggggacg cctgggtcgt tcgcccacca ggcctaggct acgtccatg
 120
 ctccccagc aatctctgtc tacacctctc gcggcgctt gccctcctcc gaccctttc
 180
 cagccannaa gtccccccac cccttcagag aagcagcctc aaattccaga agtggaggct
 240
 ccagcctccc cgcgaggtac cagccccaca gtcttctggg agccattgtg gccagggacg
 300
 gcctctggac tgccaggctg ggttggggac caggaacat cggctactc aggtgtgagg
 360
 gggcaggtct ggctgcccc aaagttggct ccaccttga can
 403

<210> 2552

<211> 134

<212> PRT

<213> Homo sapiens

<400> 2552

Xaa Pro Ala Ser Leu Thr Ser Val Ser Pro Pro Arg Gly Arg Leu Ser
 1 5 10 15
 Thr Leu Asn Arg Gly Leu His Phe Trp Gly Arg Leu Val Arg Ser Pro
 20 25 30
 Thr Arg Pro Arg Leu Arg Ser Met Leu Pro Gln Gln Ser Leu Ser Thr
 35 40 45
 Pro Pro Ala Ala Pro Cys Pro Pro Thr Pro Phe Gln Pro Xaa Ser
 50 55 60
 Pro Pro Thr Pro Ser Glu Lys Gln Pro Gln Ile Pro Glu Val Glu Ala
 65 70 75 80
 Pro Ala Ser Pro Arg Gly Thr Ser Pro Thr Val Phe Trp Glu Pro Leu
 85 90 95
 Trp Pro Gly Thr Ala Ser Gly Leu Pro Gly Trp Val Gly Asp Gln Gly
 100 105 110
 Thr Ser Val Tyr Ser Gly Val Arg Gly Gln Val Trp Pro Ala Pro Lys
 115 120 125
 Leu Ala Pro Ser Trp Thr
 130

<210> 2553

<211> 380

<212> DNA

<213> Homo sapiens

<400> 2553

actagtgtcc ctataagaaa aggaaaggac caagacacag gaaagatgaa gcagagattg
 60
 gagagataca gcatggggcca aggagcactg ggagccagca gcagctggaa gaggcaggag
 120
 gcacccctccc tagaccgcac aggatgctac tgggtgagcc tgctgtcctg gaaaaggcgt
 180

gaagtctgcc tgagtgggca ggggcttctg cgcagcaccc agcaaggcca aggtggaagg
 240
 gacctctctg gcccctgtcc tggtccacc ctcagctgct ggcaggtggg tcaccaggcc
 300
 tctgccccaa gaaactcctg caggcagctc tggaccccct gtcttacaca ctttctcact
 360
 gagcctgcc gcatcccagn
 380

<210> 2554

<211> 111

<212> PRT

<213> Homo sapiens

<400> 2554

Met	Lys	Gln	Arg	Leu	Glu	Arg	Tyr	Ser	Met	Gly	Gln	Gly	Ala	Leu	Gly
1				5				10					15		
Ala	Ser	Ser	Ser	Trp	Lys	Arg	Gln	Glu	Ala	Ser	Ser	Leu	Asp	Arg	Thr
			20				25					30			
Gly	Cys	Tyr	Trp	Val	Ser	Leu	Leu	Ser	Trp	Lys	Arg	Arg	Glu	Val	Cys
			35				40					45			
Leu	Ser	Gly	Gln	Gly	Leu	Leu	Arg	Ser	Thr	Gln	Gln	Gly	Gln	Gly	Gly
			50				55					60			
Arg	Asp	Pro	Pro	Gly	Pro	Cys	Pro	Gly	Ser	Thr	Leu	Ser	Cys	Trp	Gln
65					70					75				80	
Val	Gly	His	Gln	Ala	Ser	Ala	Gln	Arg	Asn	Ser	Cys	Arg	Gln	Leu	Trp
			85						90					95	
Thr	Pro	Cys	Leu	Thr	His	Leu	Leu	Thr	Glu	Pro	Ala	Ser	Ile	Pro	
			100					105						110	

<210> 2555

<211> 368

<212> DNA

<213> Homo sapiens

<400> 2555

ntccggatgg aaaagtaaag accagcaata gccataacg ccattaacac atacccatat
 60
 atgttggttaa tgctgcccgg tagttcggtg gcattcttca tgggcaatag tttaatggga
 120
 gataacgcga ataatggtag tgctgttcta gtgctcacag acctggtcac ccaaatagaa
 180
 ggatttatat cctcccatat cctcattttt gtgctcgttg gcctcgcat tgtctttacc
 240
 gttgccactc gaggtgtaca gttccgcctc ttcgggcaca tgtggcacct catgctcgat
 300
 tcacggaagc aaaagggcac ctccctctcc agctctcaag cattcacagt gggctctgat
 360
 cacgcggn
 368

<210> 2556

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2556

```

Met Leu Leu Met Leu Pro Gly Ser Ser Val Ala Phe Phe Met Gly Asn
 1             5             10             15
Ser Leu Met Gly Asp Asn Ala Asn Asn Gly Ser Val Val Leu Val Leu
 20             25             30
Thr Asp Leu Val Thr Gln Ile Glu Gly Phe Ile Ser Ser His Ile Leu
 35             40             45
Ile Phe Val Leu Val Gly Leu Gly Ile Val Phe Thr Val Ala Thr Arg
 50             55             60
Gly Val Gln Phe Arg Leu Phe Gly His Met Trp His Leu Met Leu Asp
 65             70             75             80
Ser Arg Lys Gln Lys Gly Thr Ser Leu Ser Ser Ser Gln Ala Phe Thr
 85             90             95
Val Gly Leu Asp His Ala
 100

```

<210> 2557

<211> 408

<212> DNA

<213> Homo sapiens

<400> 2557

```

atcactactc cagttggtga ggcagttctg ggtcgcatct taaatgtgat cggtaggccg
 60
attgatgaga tgggccaggt taacgcgaaa gaaaaatggg aaattcaccg tccagctcct
 120
aaattcgaag accaagctgt taaagctgag atgttgatga ctggtattaa ggtcgttgat
 180
cttcttgcac cttacgcaaa ggggtggcaag atcgggtctct tcgggtggtgc gggcgtaggt
 240
aaaacagttt tgattcaaga gttgattcgt aacatcgcta ctgagcacgg tggatactct
 300
gtattcgcag gtgtcggcga gcgtactcgc gaaggtaacg atctttgggt tgagatgaaa
 360
gaatcaggcg ttatcgcaaa gaccgcactt gtattcggtc agatgaat
 408

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<210> 2558

<211> 136

<212> PRT

<213> Homo sapiens

<400> 2558

```

Ile Thr Thr Pro Val Gly Glu Ala Val Leu Gly Arg Ile Leu Asn Val
 1             5             10             15
Ile Gly Glu Pro Ile Asp Glu Met Gly Pro Val Asn Ala Lys Glu Lys
 20             25             30
Trp Glu Ile His Arg Pro Ala Pro Lys Phe Glu Asp Gln Ala Val Lys
 35             40             45
Ala Glu Met Leu Met Thr Gly Ile Lys Val Val Asp Leu Leu Ala Pro
 50             55             60
Tyr Ala Lys Gly Gly Lys Ile Gly Leu Phe Gly Gly Ala Gly Val Gly

```

```

65          70          75          80
Lys Thr Val Leu Ile Gln Glu Leu Ile Arg Asn Ile Ala Thr Glu His
          85          90          95
Gly Gly Tyr Ser Val Phe Ala Gly Val Gly Glu Arg Thr Arg Glu Gly
          100          105          110
Asn Asp Leu Trp Val Glu Met Lys Glu Ser Gly Val Ile Ala Lys Thr
          115          120          125
Ala Leu Val Phe Gly Gln Met Asn
          130          135

```

<210> 2559
 <211> 389
 <212> DNA
 <213> Homo sapiens

```

<400> 2559
tccttgaaga tgaacatctt tcggctgcaa actgaaaagg atttgaatcc tcagaaaaca
60
gcttttctga aagatcgact gaatgcaata caggaagagc attctaagga cctgaagctg
120
ttgcatctcg aagttatgaa ttgcgccag caactgagag ctgtaaaaga ggaagaagac
180
aaggcacaag atgaggtgca aaggttgact gccactctga agattgcctc gcagacaaag
240
aagaatgcag ccattattga agaggaactg aagaccacaa aacgtaaaat gaaccttaaa
300
attcaagagc ttctagagat gacctcattt ccaagttggt tgaagaaaat aagaacctgc
360
aggatatctt tcaacaggaa catgaagaa
389

```

<210> 2560
 <211> 129
 <212> PRT
 <213> Homo sapiens

```

<400> 2560
Ser Leu Lys Met Asn Ile Phe Arg Leu Gln Thr Glu Lys Asp Leu Asn
1          5          10          15
Pro Gln Lys Thr Ala Phe Leu Lys Asp Arg Leu Asn Ala Ile Gln Glu
          20          25          30
Glu His Ser Lys Asp Leu Lys Leu Leu His Leu Glu Val Met Asn Leu
          35          40          45
Arg Gln Gln Leu Arg Ala Val Lys Glu Glu Glu Asp Lys Ala Gln Asp
          50          55          60
Glu Val Gln Arg Leu Thr Ala Thr Leu Lys Ile Ala Ser Gln Thr Lys
65          70          75          80
Lys Asn Ala Ala Ile Ile Glu Glu Glu Leu Lys Thr Thr Lys Arg Lys
          85          90          95
Met Asn Leu Lys Ile Gln Glu Leu Leu Glu Met Thr Ser Phe Pro Ser
          100          105          110
Trp Leu Lys Lys Ile Arg Thr Cys Arg Ile Ser Phe Asn Arg Asn Met
          115          120          125
Lys

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<210> 2561
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 2561
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 atgtggagcc atttgaacag gctcctcttc tggagcatat tttcttctgt cacttgtaga
 120
 aaagctgtat tggattgtga ggcaatgaaa acaaatgaat tcccttctcc atgtttggac
 180
 tcaaagacta aggtggttat gaagggtcaa aatgtatcta tgttttggtc ccataagaac
 240
 aaatcactgc agatcaccta ttcattgttt cgacgtaaga cacacctggg aaccaggat
 300
 ggaaaagggtg aacctgcgat ttttaaccta agcatcacag aagcccatga atcaggcccc
 360
 tacaaatgca aagccaagt taccagctgt tcaaaataca gtcgtgactt cagcttcacg
 420
 attgtcgac
 429

<210> 2562
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 2562
 Xaa Leu Thr Thr Val Leu Leu Cys Leu Leu Thr Pro Ser Trp Thr
 1 5 10 15
 Ser Thr Gly Arg Met Trp Ser His Leu Asn Arg Leu Leu Phe Trp Ser
 20 25 30
 Ile Phe Ser Ser Val Thr Cys Arg Lys Ala Val Leu Asp Cys Glu Ala
 35 40 45
 Met Lys Thr Asn Glu Phe Pro Ser Pro Cys Leu Asp Ser Lys Thr Lys
 50 55 60
 Val Val Met Lys Gly Gln Asn Val Ser Met Phe Cys Ser His Lys Asn
 65 70 75 80
 Lys Ser Leu Gln Ile Thr Tyr Ser Leu Phe Arg Arg Lys Thr His Leu
 85 90 95
 Gly Thr Gln Asp Gly Lys Gly Glu Pro Ala Ile Phe Asn Leu Ser Ile
 100 105 110
 Thr Glu Ala His Glu Ser Gly Pro Tyr Lys Cys Lys Ala Gln Val Thr
 115 120 125
 Ser Cys Ser Lys Tyr Ser Arg Asp Phe Ser Phe Thr Ile Val Asp
 130 135 140

<210> 2563
 <211> 267
 <212> DNA
 <213> Homo sapiens

<400> 2563
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 accccggtca ccatccagaa catgacctcc tcttatgtca ccatcacatc ccatgtcctt
 120
 aaggccttta ccctttggga acaggcagag gccctcacia ggaagaacaa agaattcttt
 180
 gctcagctca gcacaaaagt gcgcgtgttg gccctcaaca gcagcctggg ggacctgggtg
 240
 cactacacaa ggcagggcct ccagcgg
 267

<210> 2564
 <211> 89
 <212> PRT
 <213> Homo sapiens

<400> 2564
 Gly Ser Gln Thr Ser Ala Gly Ser Ser Met Gly Ala Val Gly Ala Thr
 1 5 10 15
 Ala Thr Val Ser Thr Pro Val Thr Ile Gln Asn Met Thr Ser Ser Tyr
 20 25 30
 Val Thr Ile Thr Ser His Val Leu Lys Ala Phe Thr Leu Trp Glu Gln
 35 40 45
 Ala Glu Ala Leu Thr Arg Lys Asn Lys Glu Phe Phe Ala Gln Leu Ser
 50 55 60
 Thr Lys Val Arg Val Leu Ala Leu Asn Ser Ser Leu Val Asp Leu Val
 65 70 75 80
 His Tyr Thr Arg Gln Gly Leu Gln Arg
 85

<210> 2565
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 2565
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 60
 tggttcgaat tcgattcctt ggtcaatgcc cgtgacgtgg gcggaatccc ccccccgat
 120
 gggccggtga aatcccagcg actgatccgc agcgacaacc tgcaggccct caccgaggcc
 180
 gacatcgccc agttgcagca actcgggtgc tccgatgtgg tcgatctgcg ttccacctat
 240
 gaggtggcca gcgagggccc ggggccgctg accgggcgtg gggtagccat ccaccccat
 300
 tccttctgc ccgaccagca cgccaatgtg cac
 333

<210> 2566
 <211> 111
 <212> PRT

<213> Homo sapiens

<400> 2566

```

Leu Arg Thr Ala Pro Arg Val Leu Gly Gly Val Ser Thr Ala Arg Lys
 1             5             10             15
Leu Ser His Val Trp Phe Glu Phe Asp Ser Leu Val Asn Ala Arg Asp
             20             25             30
Val Gly Gly Ile Pro Thr Pro Asp Gly Pro Val Lys Ser Gln Arg Leu
             35             40             45
Ile Arg Ser Asp Asn Leu Gln Ala Leu Thr Glu Ala Asp Ile Ala Gln
             50             55             60
Leu Gln Gln Leu Gly Val Ser Asp Val Val Asp Leu Arg Ser Thr Tyr
65             70             75             80
Glu Val Ala Ser Glu Gly Pro Gly Pro Leu Thr Gly Arg Gly Val Thr
             85             90             95
Ile His Pro His Ser Phe Leu Pro Asp Gln His Ala Asn Val His
             100            105            110

```

<210> 2567

<211> 396

<212> DNA

<213> Homo sapiens

<400> 2567

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ngaattcaaaa ctggtgttcg tatgggccc at aagcaaggta catatacgat gcgttttaga
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agccagttca cagatcaacg tctattcgga accgatcaat ttagtattgg tgggcgctat
120
tctgtacgag gtttttagtgg agaagaaacc ttaagagggtg actcgggcta ttatgtacaa
180
aatgaatggg cattaccatt tagaaaacaa caaattactc catatgtagg gatagatatt
240
ggacatgtat gggggccatc tacagaaact caattaggta ataccttaat tgggtggtgta
300
gttggtgtac gtggtatggt tggtgacgat gtaaaactatg atgtatcact aggaacacca
360
attaagaaac cagaaggttt tgatacagat acgcgt
396

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<210> 2568

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2568

```

Xaa Ile Gln Thr Gly Val Arg Met Gly His Lys Gln Gly Thr Tyr Thr
 1             5             10             15
Met Arg Phe Arg Ser Gln Phe Thr Asp Gln Arg Leu Phe Gly Thr Asp
             20             25             30
Gln Phe Ser Ile Gly Gly Arg Tyr Ser Val Arg Gly Phe Ser Gly Glu
             35             40             45
Glu Thr Leu Arg Gly Asp Ser Gly Tyr Tyr Val Gln Asn Glu Trp Ala
             50             55             60
Leu Pro Phe Arg Lys Gln Gln Ile Thr Pro Tyr Val Gly Ile Asp Ile

```

```

65          70          75          80
Gly His Val Trp Gly Pro Ser Thr Glu Thr Gln Leu Gly Asn Thr Leu
          85          90          95
Ile Gly Gly Val Val Gly Val Arg Gly Met Val Gly Asp Asp Val Asn
          100          105          110
Tyr Asp Val Ser Leu Gly Thr Pro Ile Lys Lys Pro Glu Gly Phe Asp
          115          120          125
Thr Asp Thr Arg
          130

```

<210> 2569

<211> 330

<212> DNA

<213> Homo sapiens

<400> 2569

```

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tacctcgtcg ccgatagagt tgtcgtgacc accaagcaca acgatgacga gcagtacgtg
120
tgggagtgccc aagcggggcg gtcgttcact gttactcgtg acacgtcagg ggagcagctt
180
ggcaggggca ctaagatcac actgttcctc aaggacgac agctggagta ccttgaggag
240
cgtcgcctca aggatctggt caagaagcac tctgagttca tcagctaccc catctccctg
300
tggactgaaa agacaacaga gaaggaaatt
330

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<210> 2570

<211> 110

<212> PRT

<213> Homo sapiens

<400> 2570

```

Leu Ala Ala Gly Ala Asp Val Ser Met Ile Gly Gln Phe Gly Val Gly
 1          5          10          15
Phe Tyr Ser Ala Tyr Leu Val Ala Asp Arg Val Val Val Thr Thr Lys
          20          25          30
His Asn Asp Asp Glu Gln Tyr Val Trp Glu Ser Gln Ala Gly Gly Ser
          35          40          45
Phe Thr Val Thr Arg Asp Thr Ser Gly Glu Gln Leu Gly Arg Gly Thr
          50          55          60
Lys Ile Thr Leu Phe Leu Lys Asp Asp Gln Leu Glu Tyr Leu Glu Glu
65          70          75          80
Arg Arg Leu Lys Asp Leu Val Lys Lys His Ser Glu Phe Ile Ser Tyr
          85          90          95
Pro Ile Ser Leu Trp Thr Glu Lys Thr Thr Glu Lys Glu Ile
          100          105          110

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<210> 2571

<211> 335

<212> DNA

<213> Homo sapiens

<400> 2571

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120
aaatgggatg tccgtttagg gcaggggaacg acagctatcg accaggtgga gaagcagcgt
180
gaagatgggt cttcctactt cgaaaccacc attacatttg aagacggcag cactgttacc
240
ggtgacgcat tcctagttagc taccggacgt acccctaaca ccgaccgcct tggcctcgac
300
aatggttccg gtgtgaaggt tgaaagggga cgcgt
335

<210> 2572

<211> 111

<212> PRT

<213> Homo sapiens

<400> 2572

Glu	Phe	Ala	Asn	Val	Phe	Ser	Gly	Met	Gly	Ser	Thr	Val	Thr	Leu	Ile
1			5					10					15		
Gly	Arg	Ser	Pro	Val	Leu	Leu	Lys	His	Leu	Asp	Asn	Glu	Leu	Ser	Glu
			20				25					30			
Leu	Phe	Thr	Glu	Ile	Ala	Arg	Glu	Lys	Trp	Asp	Val	Arg	Leu	Gly	Gln
		35				40					45				
Gly	Thr	Thr	Ala	Ile	Asp	Gln	Val	Glu	Lys	Gln	Arg	Glu	Asp	Gly	Ser
	50				55					60					
Ser	Tyr	Phe	Glu	Thr	Thr	Ile	Thr	Phe	Glu	Asp	Gly	Ser	Thr	Val	Thr
65				70					75					80	
Gly	Asp	Ala	Phe	Leu	Val	Ala	Thr	Gly	Arg	Thr	Pro	Asn	Thr	Asp	Arg
			85					90				95			
Leu	Gly	Leu	Asp	Asn	Gly	Ser	Gly	Val	Lys	Val	Glu	Arg	Gly	Arg	
			100				105						110		

<210> 2573

<211> 460

<212> DNA

<213> Homo sapiens

<400> 2573

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gccggatcca taccggaccg ttctcgtcagg gtggctcggac atcgacgaca ccgcagatgc
120
cgagacgacg ttgatacgtc caccggcgcg gtccgtgac cagccgctcg tcgccgttgc
180
cgccactggc acgatgaggg ccatcaccga gaagagaacg gccaccactc gcagaccacc
240
tcgtcccaga agagcgagga cgaaggcgat gacggcgatg accagagccg gtacagccaa
300
cgatcccacc agaacggagg agatgaaggt gagggcattg tgtgagggga ggatcgcggc
360

cactgaccac gccagtaccg gcagggtcag gatcagcccc acgagaccgg aagtgatgcg
 420
 tagccaggaa tgacgggagg ttttcgtgtc agccacgcgt
 460

<210> 2574
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 2574
 Met Gly Thr Val Asp Leu Gly Arg Leu Val Arg Ala Gly Ser Ile Pro
 1 5 10 15
 Asp Arg Phe Val Arg Val Val Gly His Arg Arg His Arg Arg Cys Arg
 20 25 30
 Asp Asp Val Asp Thr Ser Thr Gly Ala Val Arg Asp Pro Arg Arg Arg
 35 40 45
 Arg Arg Cys Arg His Trp His Asp Glu Gly His His Arg Glu Glu Asn
 50 55 60
 Gly His His Ser Gln Thr Thr Ser Ser Gln Lys Ser Glu Asp Glu Gly
 65 70 75 80
 Asp Asp Gly Asp Asp Gln Ser Arg Tyr Ser Gln Arg Ser His Gln Asn
 85 90 95
 Gly Gly Asp Glu Gly Glu Gly Ile Val
 100 105

<210> 2575
 <211> 3954
 <212> DNA
 <213> Homo sapiens

<400> 2575
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 ccactctcgc gcctccgaac agccacaggg gcaaagccct gtcaccccca ggatccggtc
 120
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 180
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 240
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 300
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<210> 2576

<211> 1016

<212> PRT

<213> Homo sapiens

<400> 2576

Met	Ala	Pro	Arg	Thr	Leu	Trp	Ser	Cys	Tyr	Leu	Cys	Cys	Leu	Leu	Thr
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Ala	Ala	Ala	Gly	Ala	Ala	Ser	Tyr	Pro	Pro	Arg	Gly	Phe	Ser	Leu	Tyr
			20					25					30		
Thr	Gly	Ser	Ser	Gly	Ala	Leu	Ser	Pro	Gly	Gly	Pro	Gln	Ala	Gln	Ile
		35					40					45			
Ala	Pro	Arg	Pro	Ala	Ser	Arg	His	Arg	Asn	Trp	Cys	Ala	Tyr	Val	Val
	50				55						60				
Thr	Arg	Thr	Val	Ser	Cys	Val	Leu	Glu	Asp	Gly	Val	Glu	Thr	Tyr	Val
65					70					75				80	
Lys	Tyr	Gln	Pro	Cys	Ala	Trp	Gly	Gln	Pro	Gln	Cys	Pro	Gln	Ser	Ile
				85				90						95	
Met	Tyr	Arg	Arg	Phe	Leu	Arg	Pro	Arg	Tyr	Arg	Val	Ala	Tyr	Lys	Thr
		100						105					110		
Val	Thr	Asp	Met	Glu	Trp	Arg	Cys	Gln	Gly	Tyr	Gly	Gly	Asp	Asp	
		115				120					125				
Cys	Ala	Glu	Ser	Pro	Ala	Pro	Ala	Leu	Gly	Pro	Ala	Ser	Ser	Thr	Pro
	130					135					140				
Arg	Pro	Leu	Ala	Arg	Pro	Ala	Arg	Pro	Asn	Leu	Ser	Gly	Ser	Ser	Ala
145					150					155					160
Gly	Ser	Pro	Leu	Ser	Gly	Leu	Gly	Gly	Glu	Gly	Pro	Gly	Glu	Ser	Glu
				165				170						175	
Lys	Val	Gln	Gln	Leu	Glu	Glu	Gln	Val	Gln	Ser	Leu	Thr	Lys	Glu	Leu
		180						185					190		
Gln	Gly	Leu	Arg	Gly	Val	Leu	Gln	Gly	Leu	Ser	Gly	Arg	Leu	Ala	Glu
		195				200						205			
Asp	Val	Gln	Arg	Ala	Val	Glu	Thr	Ala	Phe	Asn	Gly	Arg	Gln	Gln	Pro
	210					215					220				
Ala	Asp	Ala	Ala	Ala	Arg	Pro	Gly	Val	His	Glu	Thr	Leu	Asn	Glu	Ile
225					230					235					240
Gln	His	Gln	Leu	Gln	Leu	Leu	Asp	Thr	Arg	Val	Ser	Thr	His	Asp	Gln
				245				250						255	
Glu	Leu	Gly	His	Leu	Asn	Asn	His	His	Gly	Gly	Ser	Ser	Ser	Ser	Gly
			260					265					270		
Gly	Ser	Arg	Ala	Pro	Ala	Pro	Ala	Ser	Ala	Pro	Pro	Gly	Pro	Ser	Glu
		275				280						285			
Glu	Leu	Leu	Arg	Gln	Leu	Glu	Gln	Arg	Leu	Gln	Glu	Ser	Cys	Ser	Val
	290					295					300				
Cys	Leu	Ala	Gly	Leu	Asp	Gly	Phe	Arg	Arg	Gln	Gln	Gln	Glu	Asp	Arg
305					310					315					320
Glu	Arg	Leu	Arg	Ala	Met	Glu	Lys	Leu	Leu	Ala	Ser	Val	Glu	Glu	Arg
				325				330						335	
Gln	Arg	His	Leu	Ala	Gly	Leu	Ala	Val	Gly	Arg	Arg	Pro	Pro	Gln	Glu
			340					345					350		
Cys	Cys	Ser	Pro	Glu	Leu	Gly	Arg	Arg	Leu	Ala	Glu	Leu	Glu	Arg	Arg

355	360	365
Leu Asp Val Val Ala Gly Ser Val Thr Val Leu Ser Gly Arg Arg Gly		
370	375	380
Thr Glu Leu Gly Gly Ala Ala Gly Gln Gly Gly His Pro Pro Gly Tyr		
385	390	395
Thr Ser Leu Ala Ser Arg Leu Ser Arg Leu Glu Asp Arg Phe Asn Ser		
	405	410
Thr Leu Gly Pro Ser Glu Glu Gln Glu Glu Ser Trp Pro Gly Ala Pro		
	420	425
Gly Gly Leu Ser His Trp Leu Pro Ala Ala Arg Gly Arg Leu Glu Gln		
	435	440
Leu Gly Gly Leu Leu Ala Asn Val Ser Gly Glu Leu Gly Gly Arg Leu		
	450	455
Asp Leu Leu Glu Glu Gln Val Ala Gly Ala Met Gln Ala Cys Gly Gln		
465	470	475
Leu Cys Ser Gly Ala Pro Gly Glu Gln Asp Ser Gln Val Ser Glu Ile		
	485	490
Leu Ser Ala Leu Glu Arg Arg Val Leu Asp Ser Glu Gly Gln Leu Arg		
	500	505
Leu Val Gly Ser Gly Leu His Thr Val Glu Ala Ala Gly Glu Ala Arg		
	515	520
Gln Ala Thr Leu Glu Gly Leu Gln Glu Val Val Gly Arg Leu Gln Asp		
	530	535
Arg Val Asp Ala Gln Asp Glu Thr Ala Ala Glu Phe Thr Leu Arg Leu		
545	550	555
Asn Leu Thr Ala Ala Arg Leu Gly Gln Leu Glu Gly Leu Leu Gln Ala		
	565	570
His Gly Asp Glu Gly Cys Gly Ala Cys Gly Gly Val Gln Glu Glu Leu		
	580	585
Gly Arg Leu Arg Asp Gly Val Glu Arg Cys Ser Cys Pro Leu Leu Pro		
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Pro Arg Gly Pro Gly Ala Gly Pro Gly Val Gly Gly Pro Ser Arg Gly		
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Pro Leu Asp Gly Phe Ser Val Phe Gly Gly Ser Ser Gly Ser Ala Leu		
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Gln Ala Leu Gln Gly Glu Leu Ser Glu Val Ile Leu Ser Phe Ser Ser		
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Leu Asn Asp Ser Leu Asn Glu Leu Gln Thr Thr Val Glu Gly Gln Gly		
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Ala Asp Leu Ala Asp Leu Gly Ala Thr Lys Asp Arg Ile Ile Ser Glu		
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Ile Asn Arg Leu Gln Gln Glu Ala Thr Glu His Ala Thr Glu Ser Glu		
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Glu Arg Phe Arg Gly Leu Glu Glu Gly Gln Ala Gln Ala Gly Gln Cys		
705	710	715
Pro Ser Leu Glu Gly Arg Leu Gly Arg Leu Glu Gly Val Cys Glu Arg		
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Leu Asp Thr Val Ala Gly Gly Leu Gln Gly Leu Arg Glu Gly Leu Ser		
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Arg His Val Ala Gly Leu Trp Ala Gly Leu Arg Glu Thr Asn Thr Thr		
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Ser Gln Met Gln Ala Ala Leu Leu Glu Lys Leu Val Gly Gly Gln Ala		
	770	775
Gly Leu Gly Arg Arg Leu Gly Ala Leu Asn Ser Ser Leu Gln Leu Leu		
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785		790		795		800
Glu Asp Arg Leu His	Gln Leu Ser Leu Lys Asp Leu Thr Gly Pro Ala					
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Gly Glu Ala Gly Pro	Pro Gly Pro Pro Gly Leu Gln Gly Pro Pro Gly					
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Pro Ala Gly Pro Pro	Gly Ser Pro Gly Lys Asp Gly Gln Glu Gly Pro					
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Ile Gly Pro Pro Gly	Pro Gln Gly Glu Gln Gly Val Glu Gly Ala Pro					
	850		855		860	
Ala Ala Pro Val Pro	Gln Val Ala Phe Ser Ala Ala Leu Ser Leu Pro					
	865		870		875	880
Arg Ser Glu Pro Gly	Thr Val Pro Phe Asp Arg Val Leu Leu Asn Asp					
	885		890		895	
Gly Gly Tyr Tyr Asp	Pro Glu Thr Gly Val Phe Thr Ala Pro Leu Ala					
	900		905		910	
Gly Arg Tyr Leu Leu	Ser Ala Val Leu Thr Gly His Arg His Glu Lys					
	915		920		925	
Val Glu Ala Val Leu	Ser Arg Ser Asn Gln Gly Val Ala Arg Val Asp					
	930		935		940	
Ser Gly Gly Tyr Glu	Pro Glu Gly Leu Glu Asn Lys Pro Val Ala Glu					
	945		950		955	960
Ser Gln Pro Ser Pro	Gly Thr Leu Gly Val Phe Ser Leu Ile Leu Pro					
	965		970		975	
Leu Gln Ala Gly Asp	Thr Val Cys Val Asp Leu Val Met Gly Gln Leu					
	980		985		990	
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<210> 2577

<211> 343

<212> DNA

<213> Homo sapiens

<400> 2577

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<210> 2578

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2578

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Met Ala Ser Trp Ala Ser Arg Arg Ser Trp Gly Trp Gly Gly Val
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      20           25           30
Cys Leu Leu Ser Lys Leu Arg Gly Ser Thr Gly Ala Gly Gln Thr Leu
      35           40           45
Leu Pro Pro Ala Gly Gln Cys Ser Leu Gly Tyr Arg Ala Leu Ser Pro
      50           55           60
Thr Val Thr Pro Glu Trp Ile Pro Ala Leu Pro Ala Leu Gly Ser Gln
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Trp Gly Leu Gly Ala Ser Gln Gly Gln His Glu Pro Leu Ala Arg Val
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Ser Asn Arg Pro
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<210> 2579

<211> 420

<212> DNA

<213> Homo sapiens

<400> 2579

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<210> 2580

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<212> PRT

<213> Homo sapiens

<400> 2580

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Val Phe Ser Tyr Gly Ser Met Phe Tyr Ser Val His Gln Ser Ala Ile
      20           25           30
Thr Ala Thr Glu Ile Arg Asn Gln Val Lys Lys Glu Met Ile Leu Ala
      35           40           45
Lys Arg Phe Phe Phe Ile Val Phe Thr Asp Ala Leu Cys Trp Ile Pro
      50           55           60
Ile Phe Val Val Lys Phe Leu Ser Leu Leu Gln Val Glu Ile Pro Gly
65           70           75           80
Thr Ile Thr Ser Trp Val Val Ile Phe Ile Leu Pro Ile Asn Ser Ala

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      85              90              95
Leu Asn Pro Ile Leu Tyr Thr Leu Thr Thr Arg Pro Phe Lys Glu Met
      100              105              110
Ile His Arg Phe Trp Tyr Asn Tyr Arg Gln Arg Lys Ser Met Asp Ser
      115              120              125
Lys Gly Gln Lys Thr Glu Ala Gly Val Cys Ser Arg
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<210> 2581
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 <212> DNA
 <213> Homo sapiens

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<400> 2581
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120
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360
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<210> 2582
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 <213> Homo sapiens

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<400> 2582
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      20          25          30
Gln Thr Thr Val Pro Asp Thr Gln Gln Phe Val Tyr Gln Ala His Ser
      35          40          45
Leu Asp Lys Ile Glu Ile Ile Gly Arg Ile Leu Gln Ala Asn Asp Val
      50          55          60
Glu Lys Val Ile Ile Phe Cys Arg Thr Lys Arg Ala Cys Gln Arg Leu
      65          70          75          80
Ser Asp Asp Leu Asp Asp Arg Gly Phe Lys Thr Arg Ala Ile His Gly
      85          90          95
Asp Leu Thr Gln Val Ala Arg Glu Lys Ala Leu Lys Lys Phe Arg His
      100         105         110
Gly Glu Ala Thr Ile Leu Val Ala Thr Asp Val Ala Ala Arg Gly Ile
      115         120         125
Asp Val Thr Gly Val Ser His Val Ile Asn His Glu Cys Pro Glu Asp

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Glu Lys Thr Tyr Val His Arg Ile Gly
145 150

<210> 2583

<211> 7098

<212> DNA

<213> Homo sapiens

<400> 2583

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<210> 2584

<211> 1186

<212> PRT

<213> Homo sapiens

<400> 2584

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Glu Tyr Asp Asn Tyr Asp	Glu Leu Val Ala Lys	Ser Leu Leu Asn Leu
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Gly Val Val Leu Ser Glu	Asn Met Asn Asp Arg	Asn Tyr Ala Asp Ser
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Met Ser Gln Gln Asp Ser	Arg Asn Met Asn Tyr	Val Met Leu Gly Lys
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Pro Met Asn Asn Gly Leu	Met Glu Lys Met Val	Glu Glu Ser Asp Glu
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Glu Val Cys Leu Ser Ser	Leu Glu Cys Leu Arg	Asn Gln Cys Phe Asp
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Lys Glu Asp Gly Cys His	Glu Arg Asp Asp Asp	Thr Thr Ser Val Asn
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Ser Asp Arg Ser Glu Glu	Val Phe Asp Met Thr	Lys Gly Asn Leu Thr
420	425	430
Leu Leu Glu Lys Ala Ile	Ala Leu Glu Thr Glu	Arg Ala Lys Ala Met
435	440	445
Arg Glu Lys Met Ala Met	Glu Ala Gly Arg Arg	Asp Asn Met Arg Ser
450	455	460
Tyr Glu Asp Gln Ser Pro	Arg Gln Leu Pro Gly	Glu Asp Arg Lys Pro
465	470	475
Lys Ser Ser Asp Ser His	Val Lys Lys Pro Tyr	Tyr Gly Lys Asp Pro
485	490	495
Ser Arg Thr Glu Lys Lys	Glu Ser Lys Cys Pro	Thr Pro Gly Cys Asp
500	505	510
Gly Thr Gly His Val Thr	Gly Leu Tyr Pro His	His Arg Ser Leu Ser
515	520	525
Gly Cys Pro His Lys Asp	Arg Val Pro Pro Glu	Ile Leu Ala Met His
530	535	540
Glu Ser Val Leu Lys Cys	Pro Thr Pro Gly Cys	Thr Gly Arg Gly His

545 550 555 560
 Val Asn Ser Asn Arg Asn Ser His Arg Ser Leu Ser Gly Cys Pro Ile
 565 570 575
 Ala Ala Ala Glu Lys Leu Ala Lys Ala Gln Glu Lys His Gln Ser Cys
 580 585 590
 Asp Val Ser Lys Ser Ser Gln Ala Ser Asp Arg Val Leu Arg Pro Met
 595 600 605
 Cys Phe Val Lys Gln Leu Glu Ile Pro Gln Tyr Gly Tyr Arg Asn Asn
 610 615 620
 Val Pro Thr Thr Thr Pro Arg Ser Asn Leu Ala Lys Glu Leu Glu Lys
 625 630 635 640
 Tyr Ser Lys Thr Ser Phe Glu Tyr Asn Ser Tyr Asp Asn His Thr Tyr
 645 650 655
 Gly Lys Arg Ala Ile Ala Pro Lys Val Gln Thr Arg Asp Ile Ser Pro
 660 665 670
 Lys Gly Tyr Asp Asp Ala Lys Arg Tyr Cys Lys Asp Pro Ser Pro Ser
 675 680 685
 Ser Ser Ser Thr Ser Ser Tyr Ala Pro Ser Ser Ser Ser Asn Leu Ser
 690 695 700
 Cys Gly Gly Gly Ser Ser Ala Ser Ser Thr Cys Ser Lys Ser Ser Phe
 705 710 715 720
 Asp Tyr Thr His Asp Met Glu Ala Ala His Met Ala Ala Thr Ala Ile
 725 730 735
 Leu Asn Leu Ser Thr Arg Cys Arg Glu Met Pro Gln Asn Leu Ser Thr
 740 745 750
 Lys Pro Gln Asp Leu Cys Ala Thr Arg Asn Pro Asp Met Glu Val Asp
 755 760 765
 Glu Asn Gly Thr Leu Asp Leu Ser Met Asn Lys Gln Arg Pro Arg Asp
 770 775 780
 Ser Cys Cys Pro Ile Leu Thr Pro Leu Glu Pro Met Ser Pro Gln Gln
 785 790 795 800
 Gln Ala Val Met Asn Asn Arg Cys Phe Gln Leu Gly Glu Gly Asp Cys
 805 810 815
 Trp Asp Leu Pro Val Asp Tyr Thr Lys Met Lys Pro Arg Arg Ile Asp
 820 825 830
 Glu Asp Glu Ser Lys Asp Ile Thr Pro Glu Asp Leu Asp Pro Phe Gln
 835 840 845
 Glu Ala Leu Glu Glu Arg Arg Tyr Pro Gly Glu Val Thr Ile Pro Ser
 850 855 860
 Pro Lys Pro Lys Tyr Pro Gln Cys Lys Glu Ser Lys Lys Asp Leu Ile
 865 870 875 880
 Thr Leu Ser Gly Cys Pro Leu Ala Asp Lys Ser Ile Arg Ser Met Leu
 885 890 895
 Ala Thr Ser Ser Gln Glu Leu Lys Cys Pro Thr Pro Gly Cys Asp Gly
 900 905 910
 Ser Gly His Ile Thr Gly Asn Tyr Ala Ser His Arg Ser Leu Ser Gly
 915 920 925
 Cys Pro Arg Ala Lys Lys Ser Gly Ile Arg Ile Ala Gln Ser Lys Glu
 930 935 940
 Asp Lys Glu Asp Gln Glu Pro Ile Arg Cys Pro Val Pro Gly Cys Asp
 945 950 955 960
 Gly Gln Gly His Ile Thr Gly Lys Tyr Ala Ser His Arg Ser Ala Ser
 965 970 975
 Gly Cys Pro Leu Ala Ala Lys Arg Gln Lys Asp Gly Tyr Leu Asn Gly

980 985 990
 Ser Gln Phe Ser Trp Lys Ser Val Lys Thr Glu Gly Met Ser Cys Pro
 995 1000 1005
 Thr Pro Gly Cys Asp Gly Ser Gly His Val Ser Gly Ser Phe Leu Thr
 1010 1015 1020
 His Arg Ser Leu Ser Gly Cys Pro Arg Ala Thr Ser Ala Met Lys Lys
 1025 1030 1035 1040
 Ala Lys Leu Ser Gly Glu Gln Met Leu Thr Ile Lys Gln Arg Ala Ser
 1045 1050 1055
 Asn Gly Ile Glu Asn Asp Glu Glu Ile Lys Gln Leu Asp Glu Glu Ile
 1060 1065 1070
 Lys Glu Leu Asn Glu Ser Asn Ser Gln Met Glu Ala Asp Met Ile Lys
 1075 1080 1085
 Leu Arg Thr Gln Ile Thr Thr Met Glu Ser Asn Leu Lys Thr Ile Glu
 1090 1095 1100
 Glu Glu Asn Lys Val Ile Glu Gln Gln Asn Glu Ser Leu Leu His Glu
 1105 1110 1115 1120
 Leu Ala Asn Leu Ser Gln Ser Leu Ile His Ser Leu Ala Asn Ile Gln
 1125 1130 1135
 Leu Pro His Met Asp Pro Ile Asn Glu Gln Asn Phe Asp Ala Tyr Val
 1140 1145 1150
 Thr Thr Leu Thr Glu Met Tyr Thr Asn Gln Asp Arg Tyr Gln Ser Pro
 1155 1160 1165
 Glu Asn Lys Ala Leu Leu Glu Asn Ile Lys Gln Ala Val Arg Gly Ile
 1170 1175 1180
 Gln Val
 1185

<210> 2585

<211> 542

<212> DNA

<213> Homo sapiens

<400> 2585

cactcactcc tccacagaat ttggcctcag ccagcccccac gctcagcatg cccagccctg
 60
 ccaagagccc agggatcgcc tcgctgacag accccaaaac acggggccacg ccaccccgtc
 120
 ctctaggtac ctgtgcccc agtctcaagc atcactccgt gtctccctca catgccttct
 180
 gggcctctag ccctcaaaga gctaaagtat gtgagcactt tctcagccct ttaaaccgat
 240
 taagtcatgt catcctcaca aggtgtgtgt gttttattac ctctgtttca ggtgcaagtc
 300
 atccccggga ggagtgggtg ggatgccgcc tgaccctggg ccacctggct gcagcatctg
 360
 tgttgatgac caccctctg cctcaggctt tgctcctgaa tgttcttgct ctctaggtct
 420
 gtccgctcct ggccctgctc ttcttaactc cgttcaagcc cctgggtca cacgtccatg
 480
 ctcatcactt caatgacgcg gatgctggcg atccccaaat ctctaatacc aagtgcagat
 540
 ct
 542

<210> 2586
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 2586
 Met Pro Ser Pro Ala Lys Ser Pro Gly Ile Ala Ser Leu Thr Asp Pro
 1 5 10 15
 Lys Thr Arg Ala Thr Pro Pro Arg Pro Leu Gly Thr Cys Ala Pro Ser
 20 25 30
 Leu Lys His His Ser Val Ser Pro Ser His Ala Phe Trp Ala Ser Ser
 35 40 45
 Pro Gln Arg Ala Lys Val Cys Glu His Phe Leu Ser Pro Leu Asn Gly
 50 55 60
 Leu Ser His Val Ile Leu Thr Arg Leu Leu Cys Phe Ile Thr Ser Val
 65 70 75 80
 Ser Gly Ala Ser His Pro Arg Glu Glu Trp Trp Gly Cys Arg Leu Thr
 85 90 95
 Leu Gly His Leu Ala Ala Ala Ser Val Leu Met Thr Thr Leu Leu Pro
 100 105 110
 Gln Ala Leu Leu Leu Asn Val Leu Ala Leu
 115 120

<210> 2587
 <211> 435
 <212> DNA
 <213> Homo sapiens

<400> 2587
 ncgaatatcc atgcagcgat cccggggcgga atgctctcca acatggagtc ccagcttgag
 60
 gcccagggcg ctggagaccg catggatgag gtcataagg aggtgccgcg cgttcgtaag
 120
 gatgccggct acccgccgct ggtaaccccg tcgtcccaga tcgtgggaac ccaggcgggtg
 180
 ttcaacgtct tgatgggcaa tggttcgtac aagaatctca ctgccgagtt tgccgacctc
 240
 atgctcggct actacggcaa gccattggc gagctcaatc ctgagatcgt cgagatggcc
 300
 aagaagcaga ccggcaagga gccgatcgac tgccgtcccc cgcacttgct cgagcctgag
 360
 tgggatcagt tggtcgagca ggccaagagt cttgagggct tcgacggctc cgacgaggac
 420
 gttcttacca acgcg
 435

<210> 2588
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 2588
 Xaa Asn Ile His Ala Ala Ile Pro Gly Gly Met Leu Ser Asn Met Glu

```

      1           5           10           15
Ser Gln Leu Glu Ala Gln Gly Ala Gly Asp Arg Met Asp Glu Val Met
      20           25           30
Lys Glu Val Pro Arg Val Arg Lys Asp Ala Gly Tyr Pro Pro Leu Val
      35           40           45
Thr Pro Ser Ser Gln Ile Val Gly Thr Gln Ala Val Phe Asn Val Leu
      50           55           60
Met Gly Asn Gly Ser Tyr Lys Asn Leu Thr Ala Glu Phe Ala Asp Leu
      65           70           75           80
Met Leu Gly Tyr Tyr Gly Lys Pro Ile Gly Glu Leu Asn Pro Glu Ile
      85           90           95
Val Glu Met Ala Lys Lys Gln Thr Gly Lys Glu Pro Ile Asp Cys Arg
      100          105          110
Pro Ala Asp Leu Leu Glu Pro Glu Trp Asp Gln Leu Val Glu Gln Ala
      115          120          125
Lys Ser Leu Glu Gly Phe Asp Gly Ser Asp Glu Asp Val Leu Thr Asn
      130          135          140
Ala
145

```

<210> 2589

<211> 366

<212> DNA

<213> Homo sapiens

<400> 2589

```

ccggcgaaga aggacatggc catggtcttc ggcgcgactc attacgtcga cccgacggcc
60
ggcgatccgg ttgagcagat cagagcgctg accagggggc ggcgcgtcga tttcgcgatc
120
gaggtcgctc gcatcgtcga ggtcatggag caggcctact ggcgcgcgcg acgcggcggc
180
acgatcgctc acgtcggggc gctgggcacg gacgccaagc tggctcctgcc ggccaacgac
240
ctgcacggcg gcgccaagac gatcatcggc tgcgccaacg gattggggcg agtgcgacc
300
gactatgcca agatgatctc gctggtcgag accggacggc tggacctggg cgggatgac
360
acgcgt
366

```

<210> 2590

<211> 122

<212> PRT

<213> Homo sapiens

<400> 2590

```

Pro Ala Lys Lys Asp Met Ala Met Val Phe Gly Ala Thr His Tyr Val
      1           5           10           15
Asp Pro Thr Ala Gly Asp Pro Val Glu Gln Ile Arg Ala Leu Thr Arg
      20           25           30
Gly Arg Gly Val Asp Phe Ala Ile Glu Val Val Gly Ile Val Glu Val
      35           40           45
Met Glu Gln Ala Tyr Trp Ala Ala Arg Arg Gly Gly Thr Ile Val Tyr

```

```

      50              55              60
Val Gly Ala Leu Gly Ile Asp Ala Lys Leu Val Leu Pro Ala Asn Asp
65              70              75              80
Leu His Gly Gly Ala Lys Thr Ile Ile Gly Cys Ala Asn Gly Leu Gly
      85              90              95
Ala Val Arg Thr Asp Tyr Ala Lys Met Ile Ser Leu Val Glu Thr Gly
      100             105             110
Arg Leu Asp Leu Gly Gly Met Ile Thr Arg
      115             120

```

<210> 2591
 <211> 341
 <212> DNA
 <213> Homo sapiens

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<400> 2591
acgcgtaaag gcatgacctc accttatcat cagggtcaca cgtgtgttat tctggggctg
60
agcagcccac gagttgtcca gcaccaggcc aggggtcagt cagcaatgag gacagctcct
120
tcctgctcca gggcaggccc tgggcagggc aatgctgggg acacgggtggg gagtaggcca
180
cagcttctgt gggggagttc ctatggcagg aggatcatgc ccagcagcgt ggaagagcaa
240
gggggtgaccc tgcactcgag gctcctggga agacggggag gggttgaggtt acatgagggg
300
gaggggtcag ttggtgcatt cacagaacag caggggtggcc a
341

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<210> 2592
 <211> 109
 <212> PRT
 <213> Homo sapiens

```

<400> 2592
Met Thr Ser Pro Tyr His Gln Gly His Thr Cys Val Ile Leu Gly Leu
1      5      10      15
Ser Ser Pro Arg Val Val Gln His Gln Ala Arg Gly Gln Ser Ala Met
      20      25      30
Arg Thr Ala Pro Ser Cys Ser Arg Ala Gly Pro Gly Gln Gly Asn Ala
      35      40      45
Gly Asp Thr Val Gly Ser Arg Pro Gln Leu Leu Trp Gly Ser Ser Tyr
      50      55      60
Gly Arg Arg Ile Met Pro Ser Ser Val Glu Glu Gln Gly Val Thr Leu
65      70      75      80
His Ser Arg Leu Leu Gly Arg Arg Gly Gly Leu Arg Leu His Glu Gly
      85      90      95
Glu Gly Ser Val Gly Ala Phe Thr Glu Gln Gln Gly Gly
      100     105

```

<210> 2593
 <211> 501
 <212> DNA
 <213> Homo sapiens

<400> 2593

cgcgtaaggc caccagaaga tttttatgca cagattccgt tgcttcgaga gctaatttcg
 60
 gcgctttcat ggggttttat ggaggtggat gaatatgagg cggatgatat taccggtacc
 120
 ttggcgcgcc aagcggatga agcgggggat tatatgactt atattgtgtc ttcggacctc
 180
 gatatgctgc aaatcgtaga tgaaaacacc aagatgtatc gaattctgcg gggattttcg
 240
 gatctcgagg agatggatac tccagcgatt gaagaaaaat atggaatctt gaagtcgcaa
 300
 tttttggacc tgaaggcgct gaagggggat aattcggata atattccagg cgtaccaggg
 360
 attggtgaga aaaccgcagt gaaactcttg aatgagtatg gtagcttggg ggggatttat
 420
 aatcatatca aggaaatttc gggggcgaca cagaagaaat tgattgctgg acgcgaatca
 480
 gctgagatgt ctcttaagct t
 501

<210> 2594

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2594

Arg Val Arg Pro Pro Glu Asp Phe Tyr Ala Gln Ile Pro Leu Leu Arg
 1 5 10 15
 Glu Leu Ile Ser Ala Leu Ser Trp Gly Phe Met Glu Val Asp Glu Tyr
 20 25 30
 Glu Ala Asp Asp Ile Ile Gly Thr Leu Ala Arg Gln Ala Asp Glu Ala
 35 40 45
 Gly Asp Tyr Met Thr Tyr Ile Val Ser Ser Asp Leu Asp Met Leu Gln
 50 55 60
 Ile Val Asp Glu Asn Thr Lys Met Tyr Arg Ile Leu Arg Gly Phe Ser
 65 70 75 80
 Asp Leu Glu Glu Met Asp Thr Pro Ala Ile Glu Glu Lys Tyr Gly Ile
 85 90 95
 Leu Lys Ser Gln Phe Leu Asp Leu Lys Ala Leu Lys Gly Asp Asn Ser
 100 105 110
 Asp Asn Ile Pro Gly Val Pro Gly Ile Gly Glu Lys Thr Ala Val Lys
 115 120 125
 Leu Leu Asn Glu Tyr Gly Ser Leu Glu Gly Ile Tyr Asn His Ile Lys
 130 135 140
 Glu Ile Ser Gly Ala Thr Gln Lys Lys Leu Ile Ala Gly Arg Glu Ser
 145 150 155 160
 Ala Glu Met Ser Leu Lys Leu
 165

<210> 2595

<211> 928

<212> DNA

<213> Homo sapiens

<400> 2595

agatcttcca gatgaacaa tgatcaatta agacacgcgg cgacatgggtg gcccctgcct
 60
 caccctccag ggatacctgt aatacctgct tcccacttca tgggtacaa tctcatgctg
 120
 gtcacaattt ctggggctca ctcatataac accaacaat gggatatttg tgaagaactt
 180
 cgcctgcggg agcttgaaga agtcaaggcc agagctgctc agatggaaaa gaccatgcgg
 240
 tgggtgctgg actgcactgc caactggaga gaaaaatgga gtaaagttcg agctgaaagg
 300
 aacagtgccg gaaaggaagg aagacaactc agaataaaac tagagatggc gatgaaagaa
 360
 tcggatccac tgaacagaa acagagtttg ccacttcaga aggaggcatt agaagcta
 420
 gttaccacagg atctgaagct tcctggcttc gtagaagaat cctgtgaaca tacagaccaa
 480
 tttcaattga gttcacaat gcatgagtct atcagagagt atttggtaaa aagacaattt
 540
 tctacaaagg aggacacaaa taataaggaa caagggtggtg ttattgattc tctaaaatta
 600
 agtgaggaga tgaagcccaa tctagatggt gttgatttat tcaacaatgg tggttctgga
 660
 aacggtgaaa cgaaaactgg gctgagactg aaagcaataa atctgccttt ggaaaatgaa
 720
 gtaactgaaa tttcagcttt gcagggtgcat ttggatgaat tccaaaaaat cttatggaag
 780
 gaaagagaaa tgcgcacagc tttggaaaaa gaaatagaga gactggagtc ggctttgtct
 840
 ctgtggaagt ggaagtatga agaactgaaa gaatcaaagc caaaaaatgt gaaagagttt
 900
 gacattcttc ttggtcaaca taatgatg
 928

<210> 2596

<211> 309

<212> PRT

<213> Homo sapiens

<400> 2596

Arg Ser Ser Arg Cys Asn Asn Asp Gln Leu Arg His Ala Ala Thr Trp
 1 5 10 15
 Trp Pro Leu Pro His Pro Pro Gly Ile Pro Val Ile Pro Ala Ser His
 20 25 30
 Phe Met Gly Tyr Asn Leu Met Leu Val Thr Ile Ser Gly Ala His Ser
 35 40 45
 Tyr Asn Thr Asn Lys Trp Asp Ile Cys Glu Glu Leu Arg Leu Arg Glu
 50 55 60
 Leu Glu Glu Val Lys Ala Arg Ala Ala Gln Met Glu Lys Thr Met Arg
 65 70 75 80
 Trp Trp Ser Asp Cys Thr Ala Asn Trp Arg Glu Lys Trp Ser Lys Val
 85 90 95
 Arg Ala Glu Arg Asn Ser Ala Gly Lys Glu Gly Arg Gln Leu Arg Ile

100 105 110
 Lys Leu Glu Met Ala Met Lys Glu Ser Asp Pro Leu Lys Gln Lys Gln
 115 120 125
 Ser Leu Pro Leu Gln Lys Glu Ala Leu Glu Ala Asn Val Thr Gln Asp
 130 135 140
 Leu Lys Leu Pro Gly Phe Val Glu Glu Ser Cys Glu His Thr Asp Gln
 145 150 155 160
 Phe Gln Leu Ser Ser Gln Met His Glu Ser Ile Arg Glu Tyr Leu Val
 165 170 175
 Lys Arg Gln Phe Ser Thr Lys Glu Asp Thr Asn Asn Lys Glu Gln Gly
 180 185 190
 Val Val Ile Asp Ser Leu Lys Leu Ser Glu Glu Met Lys Pro Asn Leu
 195 200 205
 Asp Gly Val Asp Leu Phe Asn Asn Gly Gly Ser Gly Asn Gly Glu Thr
 210 215 220
 Lys Thr Gly Leu Arg Leu Lys Ala Ile Asn Leu Pro Leu Glu Asn Glu
 225 230 235 240
 Val Thr Glu Ile Ser Ala Leu Gln Val His Leu Asp Glu Phe Gln Lys
 245 250 255
 Ile Leu Trp Lys Glu Arg Glu Met Arg Thr Ala Leu Glu Lys Glu Ile
 260 265 270
 Glu Arg Leu Glu Ser Ala Leu Ser Leu Trp Lys Trp Lys Tyr Glu Glu
 275 280 285
 Leu Lys Glu Ser Lys Pro Lys Asn Val Lys Glu Phe Asp Ile Leu Leu
 290 295 300
 Gly Gln His Asn Asp
 305

<210> 2597

<211> 631

<212> DNA

<213> Homo sapiens

<400> 2597

ccatgggtgg gaatgcaaga gacacactct agacttacta gaggagcaag agcaggactt
 60
 ggctgcacct gcagctgagg gtttagcagga attaggagat aacagtagaa tagggctaga
 120
 ctgaaaaggc ctttgatgcc aggttaggaa atttacattt tatccacaaa atccaaatcc
 180
 tcctttaata atgagatgtc tttaacaagtt tttgggcaag agtggtatgg ctgacctggt
 240
 gtcctgggaa ggaactgtgt ggggatggtg tgcaggactt acctaggggtg ggaaaggcac
 300
 aagcagcatg gggctgtggc agctaccaga ggtaaaggga catttcaggg aaagacttgg
 360
 caggacaaga ccttccttgg atggatggat gaataccaga aacaggggacc caagagaaag
 420
 gccgagtttc ataggagag aagatgggtc atgtatgagg catgttgagc ttgtactgat
 480
 ggtgagacgt ccagtcgaca gtactaccca ctggccagtg agaaatgtgg gaccaggggtt
 540
 caggaggaaa ctggggccgg aaatgagcat ttggaaggcg ccaggggtgga agcgggtggt
 600

tcactccacg agtgctatatt cacttacgcg t
631

<210> 2598

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2598

Met	Gly	Leu	Trp	Gln	Leu	Pro	Glu	Val	Lys	Gly	His	Phe	Arg	Glu	Arg
1				5					10					15	
Leu	Gly	Arg	Thr	Arg	Pro	Ser	Leu	Asp	Gly	Trp	Met	Asn	Thr	Arg	Asn
			20					25					30		
Arg	Asp	Pro	Arg	Glu	Arg	Pro	Ser	Phe	Ile	Gly	Arg	Glu	Asp	Gly	Ser
		35					40					45			
Cys	Met	Arg	His	Val	Glu	Leu	Val	Leu	Met	Val	Arg	Arg	Pro	Val	Asp
	50					55				60					
Ser	Thr	Thr	His	Trp	Pro	Val	Arg	Asn	Val	Gly	Pro	Gly	Phe	Arg	Arg
65				70					75					80	
Lys	Leu	Gly	Pro	Glu	Met	Ser	Ile	Trp	Lys	Ala	Pro	Gly	Trp	Lys	Arg
				85				90						95	
Val	Val	His	Ser	Thr	Ser	Ala	Ile	Ser	Leu	Thr	Arg				
				100				105							

<210> 2599

<211> 356

<212> DNA

<213> Homo sapiens

<400> 2599

nagatcttat acagggacgt gatgttggag aactactgga accttggttc tctgggactg
60
tgtcattttg atatgaatat tatctccatg ttggaggaag ggaaagagcc ctggactgtg
120
aagagctgtg tgaaaatagc aagaaaacca agaacgcggg aatgtgtcaa aggcgtggtc
180
acagatatcc ctctaaatg tacaatcaag gatttgctac caaaagagaa gagcagtaca
240
gaagcagtat tccacacagt ggtgttgga agacacgaaa gccctgacat tgaagacttt
300
tccttcaagg aacccagaa aaatgtgcat gattttgagt gtcaatggag agatgn
356

<210> 2600

<211> 118

<212> PRT

<213> Homo sapiens

<400> 2600

Xaa	Ile	Leu	Tyr	Arg	Asp	Val	Met	Leu	Glu	Asn	Tyr	Trp	Asn	Leu	Val
1				5					10					15	
Ser	Leu	Gly	Leu	Cys	His	Phe	Asp	Met	Asn	Ile	Ile	Ser	Met	Leu	Glu
			20					25					30		
Glu	Gly	Lys	Glu	Pro	Trp	Thr	Val	Lys	Ser	Cys	Val	Lys	Ile	Ala	Arg

```

      35      40      45
Lys Pro Arg Thr Arg Glu Cys Val Lys Gly Val Val Thr Asp Ile Pro
  50      55      60
Pro Lys Cys Thr Ile Lys Asp Leu Leu Pro Lys Glu Lys Ser Ser Thr
  65      70      75      80
Glu Ala Val Phe His Thr Val Val Leu Glu Arg His Glu Ser Pro Asp
      85      90      95
Ile Glu Asp Phe Ser Phe Lys Glu Pro Gln Lys Asn Val His Asp Phe
      100      105      110
Glu Cys Gln Trp Arg Asp
      115

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<210> 2601
 <211> 329
 <212> DNA
 <213> Homo sapiens

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<400> 2601
gcgcccgatca tgatctacgg cgacgacgtc acccacctgc tcaccgaaga aggcacgcgc
  60
tacttgtaca aggcgcgttc cctggaagag cgccaagcga tgatcgccgg cgggtggtggg
  120
gtcacccgct tcggcttgcg ccacaacccc aaggacactg cgcgcatgcg ccgcgaaggc
  180
ttgatcgctt tgcccgaaga cctcggtatc cgccgcaccg acgccaccgg cgaactgttg
  240
gccgccaaga gcgtggccga cctggtggag tggtcggtg gcttgtgcaa cccgcccgcc
  300
aagttcagga gctggtaaat gcgcgcct
  329

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<210> 2602
 <211> 105
 <212> PRT
 <213> Homo sapiens

```

<400> 2602
Ala Pro Ile Met Ile Tyr Gly Asp Asp Val Thr His Leu Leu Thr Glu
  1      5      10      15
Glu Gly Ile Ala Tyr Leu Tyr Lys Ala Arg Ser Leu Glu Glu Arg Gln
      20      25      30
Ala Met Ile Ala Gly Gly Gly Gly Val Thr Ala Phe Gly Leu Arg His
      35      40      45
Asn Pro Lys Asp Thr Ala Arg Met Arg Arg Glu Gly Leu Ile Ala Leu
      50      55      60
Pro Glu Asp Leu Gly Ile Arg Arg Thr Asp Ala Thr Arg Glu Leu Leu
      65      70      75      80
Ala Ala Lys Ser Val Ala Asp Leu Val Glu Trp Ser Gly Gly Leu Cys
      85      90      95
Asn Pro Pro Ala Lys Phe Arg Ser Trp
      100      105

```

<210> 2603
 <211> 423

<212> DNA

<213> Homo sapiens

<400> 2603

tcatgatcca ttgctctacc ctttacgggt gtgcacctac gccaggtcg gtggtcagga
60

gcatcggttc ggtggtaccg aggtcgagga cttccttcac gccgttggtc gcggagggca
120

ggttgtggta agtggtcagg tgggccacga tctgggcact gatcacctcg gtgaaatcga
180

agctctgggt accctgagcg gtcgccgaca cgacacggtc cacaccggag accagaccga
240

tctcggagat gatcgcgtaa ctttcattgt cgtagaggat cttgcacgca tcgatgatgc
300

gcttgatctc cttggcagtg aagatgattt ccatcggggt gttggccgac agatactgac
360

cggagctggt ggtcacctgg gtggaatcca ggtcatccgg aaccgggttc aggttggtccg
420

cgg

423

<210> 2604

<211> 103

<212> PRT

<213> Homo sapiens

<400> 2604

Met Glu Ile Ile Phe Thr Ala Lys Glu Ile Lys Arg Ile Ile Asp Ala

1 5 10 15
Cys Lys Ile Leu Tyr Asp Asn Glu Gly Tyr Ala Ile Ile Ser Glu Ile

20 25 30
Gly Leu Val Ser Gly Val Asp Arg Val Val Ser Ala Thr Ala Gln Gly

35 40 45
Asn Gln Ser Phe Asp Phe Thr Glu Val Ile Ser Ala Gln Ile Val Ala

50 55 60
His Leu Thr Thr Tyr His Asn Leu Pro Ser Ala Asn Asn Gly Val Lys

65 70 75 80
Glu Val Leu Asp Leu Gly Thr Thr Glu Pro Met Leu Leu Thr Thr Asp

85 90 95
Leu Gly Val Gly Ala Gln Pro

100

caactacttg aaaggaatac acgtcagtat gagccctttc tcctcagcag aaggttgccc
 240
 caaagtacct cctctgaggc gagagaaagg agagaggagg agagacagct ttcacaaat
 300
 ggggcaccca ggactctagg gagagaggca cgttctcaca aaggcccttt gagc
 354

<210> 2606
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 2606
 Met Ser Lys Ala Thr Val Ser Arg Gly Phe Asp Leu Asn Ile Phe Gln
 1 5 10 15
 Asn Ile Cys Gly Lys Gln Arg Gly Glu Gly Ile Ser Pro Thr Phe Phe
 20 25 30
 Ser Thr Ser Ser Leu His Ala Gly Thr Cys Ser Thr Phe Lys Met Cys
 35 40 45
 His Phe Gly Arg Lys Gly Arg Asn Asn Tyr Leu Lys Gly Ile His Val
 50 55 60
 Ser Met Ser Pro Phe Ser Ser Ala Glu Gly Cys Pro Lys Val Pro Pro
 65 70 75 80
 Leu Arg Arg Glu Lys Gly Glu Arg Arg Arg Asp Ser Phe His Gln Met
 85 90 95
 Gly His Pro Gly Leu
 100

<210> 2607
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 2607
 tgatcaagaa caatgatacg atatacctaac caacagagga agcaacggaa gttgttggtg
 60
 tttttatgct gttttttttt tttgagaacg gatcttgccc ctgccccag gccggaatgg
 120
 atgacatgga cagaaccccg tcggaaaaaa gccggaatgt gcaaaccxaa attcccacca
 180
 cacggggggc ctaacaattg gatccatccc cnaaaaaanc cntnncaaaa aaagntaaaa
 240
 actttttttt ttttaannn anacccccaa aaaaaccaa aaaaaaatt taaaaaa
 297

<210> 2608
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 2608
 Met Ile Arg Tyr Pro Asn Gln Gln Arg Lys Gln Arg Lys Leu Leu Leu
 1 5 10 15
 Phe Leu Cys Cys Phe Phe Phe Leu Arg Thr Asp Leu Ala Pro Ala Pro

```

      20      25      30
Arg Pro Glu Trp Met Thr Trp Thr Glu Pro Arg Arg Lys Lys Ala Gly
      35      40      45
Met Cys Lys Pro Lys Phe Pro Pro His Gly Gly Pro Asn Asn Trp Ile
      50      55      60
His Pro Xaa Lys Xaa Pro Xaa Gln Lys Lys Xaa Lys Thr Phe Phe Phe
65      70      75      80
Leu Xaa Xaa Xaa Pro Gln Lys Asn Gln Lys Lys Lys Phe Lys Lys
      85      90      95

```

<210> 2609

<211> 305

<212> DNA

<213> Homo sapiens

<400> 2609

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ncgccatcgg catgatgtca ggcaaagatg atcctggcat ggcaaaggta tacggttttg
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ttgacacgtc cctgacgac cctatccgct catctggaga cccatgcgtt ccttggaacc
120
caattgccta cgaaaaaatt ttttttttcc cccccaaaaa acaccccccc ctgcgcatctg
180
tgaaagttct acctcggggg cgtcatctcg gctgtcatcg tcggcaaadc actcagctgg
240
ccgtaccctt cgtcatcgcc cgggccaccg acctcgacgg cncagcgtgc acggcaacga
300
ccacc
305

```

<210> 2610

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2610

```

Met Met Ser Gly Lys Asp Asp Pro Gly Met Ala Lys Val Tyr Gly Phe
  1      5      10      15
Val Asp Thr Ser Leu Thr Ile Pro Ile Arg Ser Ser Gly Asp Pro Cys
      20      25      30
Val Pro Trp Thr Pro Ile Ala Tyr Glu Lys Ile Phe Phe Phe Pro Pro
      35      40      45
Lys Lys His Pro Pro Leu Ala Ser Val Lys Val Leu Pro Arg Gly Arg
      50      55      60
His Leu Gly Cys His Arg Arg Gln Ile Thr Gln Leu Ala Val Pro Phe
65      70      75      80
Val Ile Ala Arg Ala Thr Asp Leu Asp Gly Xaa Ala Cys Thr Ala Thr
      85      90      95
Thr Thr

```

<210> 2611

<211> 342

<212> DNA

<213> Homo sapiens

<400> 2611
 gccgccgcga tcgacggcga ctccctcgacc agctgggtgt ccagctcgct gcaaaccgct
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 gtggggcaat ggcttcaggt ggacttcgac catccgggtga ccaacgcgac catcaccctg
 120
 acgcccagcg ccaccgctgt cggagctcag gtgcgccgcg tcgaggtggc aacagccaac
 180
 ggcaccagca caattcgctt cgaccagccc ggcaagccgc tgacggcggc gctgcccctac
 240
 ggcgagacct catgggtccg gttcaccgcg accggcaccg acgacggctc ccccggcgtg
 300
 cagttcggca tcaccgactt ctccgtgacg cagtacgacg cg
 342

<210> 2612
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 2612
 Ala Ala Ala Ile Asp Gly Asp Ser Ser Thr Ser Trp Val Ser Ser Ser
 1 5 10 15
 Leu Gln Thr Ala Val Gly Gln Trp Leu Gln Val Asp Phe Asp His Pro
 20 25 30
 Val Thr Asn Ala Thr Ile Thr Leu Thr Pro Ser Ala Thr Ala Val Gly
 35 40 45
 Ala Gln Val Arg Arg Val Glu Val Ala Thr Ala Asn Gly Thr Ser Thr
 50 55 60
 Ile Arg Phe Asp Gln Pro Gly Lys Pro Leu Thr Ala Ala Leu Pro Tyr
 65 70 75 80
 Gly Glu Thr Ser Trp Val Arg Phe Thr Ala Thr Gly Thr Asp Asp Gly
 85 90 95
 Ser Pro Gly Val Gln Phe Gly Ile Thr Asp Phe Ser Val Thr Gln Tyr
 100 105 110
 Asp Ala

<210> 2613
 <211> 414
 <212> DNA
 <213> Homo sapiens

<400> 2613
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 ttctcctcct caaaagggtg agggctctgac ctaatggtac tttgtctgat gttttccaga
 120
 tatgccccta ctgggaaggg ccaagtgggc aggcagagtc tgggggtggag cgaggtgggg
 180
 ctgggaagca ctctgcttt tctgctgccc cagaacgaat gcaagttctg gcagcttctc
 240
 ctccctcctgg gaggaggaaa ggagggtcgc cctccaggtc tcaggctgag ggagtgggct
 300

ggagaccctc tagatggcca gcagaggctg gcctctgtga gaaggcttcc ttgcgtgact
 360
 ctggggccccc tcccaggctc tcctcgtggc aggcagggac ttggggccagc atgg
 414

<210> 2614

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2614

Met	Val	Leu	Cys	Leu	Met	Phe	Ser	Arg	Tyr	Ala	Pro	Thr	Gly	Lys	Gly
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Gln	Val	Gly	Arg	Gln	Ser	Leu	Gly	Trp	Ser	Glu	Val	Gly	Leu	Gly	Ser
		20						25					30		
Thr	Pro	Ala	Phe	Leu	Leu	Pro	Gln	Asn	Glu	Cys	Lys	Phe	Trp	Gln	Leu
		35					40					45			
Leu	Leu	Leu	Leu	Gly	Gly	Gly	Lys	Glu	Gly	Ser	Pro	Pro	Gly	Leu	Arg
	50				55					60					
Leu	Arg	Glu	Trp	Ala	Gly	Asp	Pro	Leu	Asp	Gly	Gln	Gln	Arg	Leu	Ala
65				70					75				80		
Ser	Val	Arg	Arg	Leu	Pro	Cys	Val	Thr	Leu	Gly	Pro	Leu	Pro	Gly	Ser
			85					90				95			
Pro	Arg	Gly	Arg	Gln	Gly	Leu	Gly	Pro	Ala	Trp					
		100					105								

<210> 2615

<211> 394

<212> DNA

<213> Homo sapiens

<400> 2615

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 gacgtcgacg ccattgctgaa ggaaacgctg gccagttcg gccacatcga taccctcgtc
 120
 aacaatgcgg gcgtcacgca tgcggccgat ttctcgcacg tgtgcgaaga cgatttcgac
 180
 cgggtcatgc gcattaacct gaaatcgatg ttctgtgctg gccaggccgc ggcgcgcgag
 240
 atggtcaagc gcaacagcgg ctgcatcatc aacatgtcca gcgtgaatgc ggaactggcc
 300
 attccgaacc aggtgccgta cgtggtgctg aaaggcgcca tcaaccagct gaccaaggtc
 360
 atggccttga acctggcgcc gcacggtgctg cgct
 394

<210> 2616

<211> 131

<212> PRT

<213> Homo sapiens

<400> 2616

Xaa Ala Ala Ala Leu Gly Arg Ser Ala Leu Leu Leu Arg Xaa Asp Val


```

      1           5           10           15
Ser Gln Lys Ala Asp Val Asp Ala Met Leu Lys Glu Thr Leu Ala Gln
      20           25           30
Phe Gly His Ile Asp Ile Leu Val Asn Asn Ala Gly Val Thr His Ala
      35           40           45
Ala Asp Phe Leu Asp Val Cys Glu Asp Asp Phe Asp Arg Val Met Arg
      50           55           60
Ile Asn Leu Lys Ser Met Phe Leu Cys Gly Gln Ala Ala Ala Arg Glu
      65           70           75           80
Met Val Lys Arg Asn Ser Gly Cys Ile Ile Asn Met Ser Ser Val Asn
      85           90           95
Ala Glu Leu Ala Ile Pro Asn Gln Val Pro Tyr Val Val Ser Lys Gly
      100          105          110
Ala Ile Asn Gln Leu Thr Lys Val Met Ala Leu Asn Leu Ala Pro His
      115          120          125
Gly Ala Arg
      130

```

<210> 2617

<211> 513

<212> DNA

<213> Homo sapiens

<400> 2617

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naccggttg catcatgctc acagcactgg gggttccctt cttcttttc ctctcagaa
60
agacattgtg agatgggaaa tatcatggaa acacctatac ttccgggtc ccacttgaac
120
gtcaccttgg gaaatcacia gattctcaat gacgtctccg tatcattcca agcgggagtt
180
atgcacgcca tacttgcccc caacggttct gggaagacca ccctggtagc cacgttatgc
240
ggagccctct ccccgagtc ggggagcgtc aaattcgatg gaacggatct atccacgatg
300
tcgcatacct gtatcgcgcg tcgtattgcg atcgtctggc agagcgcgac cgctccctct
360
gacctcaccg tacgtcacct cgttggttac gggagatatg cccacacacc gtggtggcag
420
ataagggaca ccagcgccga cagccatgtg gaacaagcaa tggagctggc cgatgtcacg
480
tgcttcgccc atcgacgcgt caccactctc tca
513

```

<210> 2618

<211> 171

<212> PRT

<213> Homo sapiens

<400> 2618

```

Xaa Arg Leu Ala Ser Cys Ser Gln His Trp Gly Phe Pro Ser Phe Phe
      1           5           10           15
Ser Ser Ser Glu Arg His Cys Glu Met Gly Asn Ile Met Glu Thr Pro
      20           25           30
Ile Leu Ser Gly Ser His Leu Asn Val Thr Leu Gly Asn His Lys Ile

```

```

      35              40              45
Leu Asn Asp Val Ser Val Ser Phe Gln Ala Gly Val Met His Ala Ile
  50      55      60
Leu Gly Pro Asn Gly Ser Gly Lys Thr Thr Leu Val Arg Thr Leu Cys
  65      70      75      80
Gly Ala Leu Ser Pro Glu Ser Gly Ser Val Lys Phe Asp Gly Thr Asp
      85      90      95
Leu Ser Thr Met Ser Ala Ser Cys Ile Ala Arg Arg Ile Ala Ile Val
      100      105      110
Trp Gln Ser Ala Thr Ala Pro Ser Asp Leu Thr Val Arg His Leu Val
      115      120      125
Gly Tyr Gly Arg Tyr Ala His Thr Pro Trp Trp Gln Ile Arg Asp Thr
      130      135      140
Ser Ala Asp Ser His Val Glu Gln Ala Met Glu Leu Ala Asp Val Thr
      145      150      155      160
Cys Phe Ala Asp Arg Arg Val Thr Thr Leu Ser
      165      170

```

<210> 2619

<211> 348

<212> DNA

<213> Homo sapiens

<400> 2619

```

nnaaatttcg acgaccttga ggttttcctc aagctgttgc cgcgttcggc anccggggaa
60
cggatgaacc cgtacaactc ggtgtggagc ggtgtgaccg acggtgacgg gccgcaggaa
120
cagcacgtca ttttccttga taacggctcg accgacgtgc ttgccgacac ccttggtcgc
180
gaagtgttgc ggtgcatccg gtgtgcttcg tgtatcaata tctgcccggg ttacgagcgg
240
gcgggcccgtc acccttacgg ctccggtgtac cccgggccga ttggtgcggg gctcaatccg
300
cagctgcggg gcgtggagca tcccgtcgat cgtggtctgc catacgcg
348

```

<210> 2620

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2620

```

Xaa Asn Phe Asp Asp Leu Glu Val Phe Leu Lys Leu Leu Pro Arg Ser
  1      5      10      15
Ala Xaa Gly Glu Arg Met Asn Pro Tyr Asn Ser Val Trp Ser Gly Val
      20      25      30
Thr Asp Gly Asp Gly Pro Gln Glu Gln His Val Ile Phe Leu Asp Asn
      35      40      45
Gly Arg Thr Asp Val Leu Ala Asp Thr Leu Gly Arg Glu Val Leu Arg
      50      55      60
Cys Ile Arg Cys Ala Ser Cys Ile Asn Ile Cys Pro Val Tyr Glu Arg
      65      70      75      80
Ala Gly Gly His Pro Tyr Gly Ser Val Tyr Pro Gly Pro Ile Gly Ala

```

	85		90		95										
Val	Leu	Asn	Pro	Gln	Leu	Arg	Gly	Val	Glu	His	Pro	Val	Asp	Arg	Gly
	100						105						110		
Leu	Pro	Tyr	Ala												
	115														

<210> 2621
 <211> 1485
 <212> DNA
 <213> Homo sapiens

<400> 2621
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 120
 ttttctttcc ctgttttgat tttgtgaag ggagaggtgg tggtaggttag gatcagagct
 180
 ctccctggcat ccgtggggag gatttgctgg tggtaggttc gggctcatgc ccagacacac
 240
 tcaactgcccc gtctgtccaa ggcctccctt tcccccttgc tggtagggagg agctcgtgtg
 300
 ctccctggcc gcttactgga agggcggttt tcagagctgc agggacaggg tgagcagctg
 360
 aagggctagg agggaagccg gcccccgctc tgcagaagct gcatttcagc tgaatctgtg
 420
 tttcagcctc agttgggtgc accgtagacc cctctctccc cgtaggttca tgtttttgtc
 480
 acattagaga ataaacagcc acacacacat tttttttccc tttaaaacag taacttgga
 540
 atatgaaaag gccagaagga ggagcaaggg ctgttttctg gagtgggtga ggtgtgtgcc
 600
 tgcagttgtc attgtcttct ccaccgggct gtcccatctt atttctgtg gaactgaatc
 660
 cctctccctt ccactccttg ggagcccagg tggtccttgg ccaccattca ggctttccaa
 720
 gaagccaacc accttggaga ttttttttct tgaatttcgc tgttttcttc tgttcccttc
 780
 agataaaaag cagctcaaga gaccttatct tagggatgag aaaaacatgc atattaattc
 840
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 900
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 960
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 1020
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 1080
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 1140
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 1200
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 1260

taacttgnta gctatctttg aaatcactgn actttgcaat ggtgctaagc tgatagattt
 1320
 aaatacacag acgggcgagt ggcgcccgtg tcgatgtctt cagccagtgg tgaccctgct
 1380
 tttgtaaccg cgtaacctg acaaaacctc agcagcagaa gtccctattt ttctaggagt
 1440
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 1485

<210> 2622

<211> 83

<212> PRT

<213> Homo sapiens

<400> 2622

Met Phe Ser Phe Pro Val Leu Ile Leu Leu Lys Gly Glu Val Val Val
 1 5 10 15
 Val Arg Ile Arg Ala Leu Leu Ala Ser Val Gly Arg Ile Cys Trp Trp
 20 25 30
 Trp Leu Arg Ala His Ala Gln Thr His Ser Leu Pro Arg Leu Ser Lys
 35 40 45
 Ala Ser Pro Ser Pro Leu Leu Val Gly Gly Ala Arg Val Leu Leu Gly
 50 55 60
 Arg Leu Leu Glu Gly Arg Phe Ser Glu Leu Gln Gly Gln Gly Glu Gln
 65 70 75 80
 Leu Lys Gly

<210> 2623

<211> 3524

<212> DNA

<213> Homo sapiens

<400> 2623

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 120
 agtgggttcc tgagtggcgg cggaggtacc ggcagtagcg gtggtagcgg ctccggcgcc
 180
 ggtggtagtg gcggcgccgg cggcgggcgc agcagcggca ggagggcaga gatggaaccc
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 300
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 360
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 420
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 540
 caccaccacc actatggggg gctgttcgct ggagctgaag agaggtctcc aggcctagga
 600

ggcgggtgaag ggggggagtca cggcgtcatc caggacctca gtattctcca ccagcatgtc
660
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720
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780
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900
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960
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1020
cagagacatg agaaaattca tagtagagag aagccatttg gatgtgatca gtgcagcatg
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1440
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1620
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1680
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1980
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2040
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2100
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2160
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2220

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 2460
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 2760
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 2820
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 2880
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 2940
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 3000
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 3180
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 3240
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 3300
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 3360
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 3420
 taaatgtact ctgaacttcc aaaccacatt cattccagcc tggtagaaca aatattcttg
 3480
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 3524

<210> 2624

<211> 895

<212> PRT

<213> Homo sapiens

<400> 2624

Met Lys Ile Gly Ser Gly Phe Leu Ser Gly Gly Gly Gly Thr Gly Ser
 1 5 10 15
 Ser Gly Gly Ser Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly

1867

450		455		460
Leu Ile Phe Lys Lys Gly Ser Arg Lys Asn Thr Asp Lys Asn Tyr Leu				
470		475		480
Asn Phe Val Ser Pro Leu Pro Asp Ile Val Gly Gln Lys Ser Leu Ser				
	485		490	495
Gly Lys Pro Ser Gly Ser Leu Gly Ile Val Ser Asn Asn Ser Val Glu				
	500		505	510
Thr Ile Gly Leu Leu Gln Ser Thr Ser Gly Lys Gln Gly Gln Ile Ser				
	515		520	525
Ser Asn Tyr Asp Asp Ala Met Gln Phe Ser Lys Lys Arg Arg Tyr Leu				
	530		535	540
Pro Thr Ala Ser Ser Asn Ser Ala Phe Ser Ile Asn Val Gly His Met				
545		550		555
Val Ser Gln Gln Ser Val Ile Gln Ser Ala Gly Val Ser Val Leu Asp				
	565		570	575
Asn Glu Ala Pro Leu Ser Leu Ile Asp Ser Ser Ala Leu Asn Ala Glu				
	580		585	590
Ile Lys Ser Cys His Asp Lys Ser Gly Ile Pro Asp Glu Val Leu Gln				
	595		600	605
Ser Ile Leu Asp Gln Tyr Ser Asn Lys Ser Glu Ser Gln Lys Glu Asp				
	610		615	620
Pro Phe Asn Ile Ala Glu Pro Arg Val Asp Leu His Thr Ser Gly Glu				
625		630		635
His Ser Glu Leu Val Gln Glu Glu Asn Leu Ser Pro Gly Thr Gln Thr				
	645		650	655
Pro Ser Asn Asp Lys Ala Ser Met Leu Gln Glu Tyr Ser Lys Tyr Leu				
	660		665	670
Gln Gln Ala Phe Glu Lys Ser Thr Asn Ala Ser Phe Thr Leu Gly His				
	675		680	685
Gly Phe Gln Phe Val Ser Leu Ser Ser Pro Leu His Asn His Thr Leu				
	690		695	700
Phe Pro Glu Lys Gln Ile Tyr Thr Thr Ser Pro Leu Glu Cys Gly Phe				
705		710		715
Gly Gln Ser Val Thr Ser Val Leu Pro Ser Ser Leu Pro Lys Pro Pro				
	725		730	735
Phe Gly Met Leu Phe Gly Ser Gln Pro Gly Leu Tyr Leu Ser Ala Leu				
	740		745	750
Asp Ala Thr His Gln Gln Leu Thr Pro Ser Gln Glu Leu Asp Asp Leu				
	755		760	765
Ile Asp Ser Gln Lys Asn Leu Glu Thr Ser Ser Ala Phe Gln Ser Ser				
	770		775	780
Ser Gln Lys Leu Thr Ser Gln Lys Glu Gln Lys Asn Leu Glu Ser Ser				
785		790		795
Thr Gly Phe Gln Ile Pro Ser Gln Glu Leu Ala Ser Gln Ile Asp Pro				
	805		810	815
Gln Lys Asp Ile Glu Pro Arg Thr Thr Tyr Gln Ile Glu Asn Phe Ala				
	820		825	830
Gln Ala Phe Gly Ser Gln Phe Lys Ser Gly Ser Arg Val Pro Met Thr				
	835		840	845
Phe Ile Thr Asn Ser Asn Gly Glu Val Asp His Arg Val Arg Thr Ser				
	850		855	860
Val Ser Asp Phe Ser Gly Tyr Thr Asn Met Met Ser Asp Val Ser Glu				
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895

<210> 2625

<211> 1398

<212> DNA

<213> Homo sapiens

<400> 2625

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<211> 137

<212> PRT

<213> Homo sapiens

<400> 2626

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Arg Ile Val Ala Ala His Asn Lys Cys Pro Arg Asp Gly Arg Phe Val
      35           40           45
Glu Gln Leu Gly Ser Tyr Asp Pro Leu Pro Asn Ser His Gly Glu Lys
      50           55           60
Leu Val Ala Leu Asn Leu Asp Arg Ile Arg His Trp Ile Gly Cys Gly
      65           70           75           80
Ala His Leu Ser Lys Pro Met Glu Lys Leu Leu Gly Leu Ala Gly Phe
      85           90           95
Phe Pro Leu His Pro Met Met Ile Thr Asn Ala Glu Arg Leu Arg Arg
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Lys Arg Ala Arg Glu Val Leu Leu Ala Ser Gln Lys Thr Asp Ala Glu
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<210> 2627

<211> 320

<212> DNA

<213> Homo sapiens

<400> 2627

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<210> 2628

<211> 90

<212> PRT

<213> Homo sapiens

<400> 2628

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      20           25           30
Ala Pro Phe Ser Ser Thr Ser Phe Ser Val Pro Lys Lys Ala Arg Ala
      35           40           45
Asp Cys Thr Cys Ile Ser Thr Ala Glu Leu Phe Ile Cys Asp Ser Ala
      50           55           60
Phe Phe Arg Ser Ser Gly Ser Arg Glu Arg His Ser Phe Lys Val Phe
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Phe Leu Cys Ile Pro Pro Pro Leu His Ala
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<210> 2629

<211> 650

<212> DNA

<213> Homo sapiens

<400> 2629

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<212> PRT

<213> Homo sapiens

<400> 2630

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Phe Ser Lys Pro Val Val Ile Leu Pro Cys Gln His Asn Leu Cys Arg
      20           25           30
Lys Cys Ala Asn Asp Val Phe Gln Val Gly Ala Arg Asp Gly Gln Gly
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<210> 2631

<211> 5124

<212> DNA

<213> Homo sapiens

<400> 2631

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<211> 550

<212> PRT

<213> Homo sapiens

<400> 2632

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Glu	Ala	Leu	Asn	Ala	Arg	Pro	Trp	Trp	Ile	Arg	Met	Gly	Thr	Asp	Ile
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His	Lys	Asp	Asp	Val	Cys	Tyr	Phe	Ala	Tyr	His	Tyr	Pro	Tyr	Thr	Tyr
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<211> 1569

<212> DNA

<213> Homo sapiens

<400> 2633

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<210> 2634

<211> 59

<212> PRT

<213> Homo sapiens

<400> 2634

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<210> 2635

<211> 1062

<212> DNA

<213> Homo sapiens

<400> 2635

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<210> 2636

<211> 63

<212> PRT

<213> Homo sapiens

<400> 2636

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 Gly Asp Gly Ser Ile Arg Arg Tyr Phe Cys Gly Glu Ala Ala Ala
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<210> 2637

<211> 1045

<212> DNA

<213> Homo sapiens

<400> 2637

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<210> 2638

<211> 263

<212> PRT

<213> Homo sapiens

<400> 2638

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35 40 45
Leu Gln Glu Ala Gly Thr Phe Arg His Thr Leu Trp Lys Arg Val Gln
50 55 60
Gly Ala Val Thr Pro Leu Leu Ala Ser Met Ile Ser Phe Ile Asp Arg
65 70 75 80
Asp Gly Asn Leu Glu Leu Leu Thr Arg Pro Asp Thr Pro Pro Trp Ala
85 90 95
Arg Asp Leu Trp Met Phe Ile Phe Ser Asp Thr Met Leu Leu Asn Ile
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Pro Leu Val Met Asn Asn Glu Arg His Lys Gly Glu Met Ala Tyr Ile
115 120 125
Val Val Gln Asn His Met Asn Leu Ser Glu Asn Ala Ser Asn Asn Val
130 135 140
Pro Phe Ser Trp Lys Ile Lys Asp Tyr Leu Glu Glu Leu Trp Val Gln
145 150 155 160
Ala Gln Tyr Ile Thr Asp Ala Glu Gly Leu Pro Lys Lys Phe Val Asp
165 170 175
Ile Phe Gln Gln Thr Pro Leu Gly Arg Phe Leu Ala Gln Leu His Gly
180 185 190
Glu Pro Gln Gln Glu Leu Leu Gln Cys Tyr Leu Lys Asp Phe Ile Leu
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Leu Thr Met Arg Val Ser Thr Glu Glu Glu Leu Lys Phe Leu Gln Met
210 215 220
Ala Leu Trp Ser Cys Thr Arg Lys Leu Lys Ala Ala Ser Glu Ala Pro
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<210> 2639

<211> 3777

<212> DNA

<213> Homo sapiens

<400> 2639

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<211> 645

<212> PRT

<213> Homo sapiens

<400> 2640

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Leu	Thr	Ala	Ile	Thr	Ile	Pro	Arg	Pro	Ser	Val	Ala	Ser	Thr	Gln	Ser
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Lys	Leu	Ser	Arg	Gly	Gln	His	Cys	Ile	Glu	Ile	Ser	Ser	Leu	Pro	Gly
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Asp	Leu	Val	Ile	Val	Glu	Lys	Asp	His	Ser	Ala	Thr	Thr	Glu	Pro	Leu
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Gly Lys Arg Glu Lys Ile Thr Pro Arg Asn Gly Glu Leu Phe His Cys
305      310      315      320
Val Ser Glu Asn Glu His Gly Ala Pro Thr Arg Lys Asp Met Val Arg
      325      330      335
Ser Ser Phe Val Thr Arg His Ser Arg Ile Pro Val Leu Ala Gln Glu
      340      345      350
Ile Asp Ser Thr Leu Glu Ser Ser Ser Pro Val Ser Ala Lys Glu Lys
      355      360      365
Leu Leu Gln Lys Lys Ala Tyr Gln Pro Asp Leu Val Lys Leu Leu Val
      370      375      380
Glu Lys Arg Gln Phe Lys Ser Phe Leu Gly Asp Leu Ser Ser Ala Ser
385      390      395      400
Asp Lys Leu Leu Glu Glu Lys Leu Ala Thr Val Pro Ala Pro Phe Cys
      405      410      415
Glu Glu Glu Val Leu Thr Pro Phe Ser Arg Leu Thr Val Asp Ser His
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Leu Ser Arg Ser Ala Glu Asp Ser Phe Leu Ser Pro Ile Ile Ser Gln
      435      440      445
Ser Arg Lys Ser Lys Ile Pro Arg Pro Val Ser Trp Val Asn Thr Asp
      450      455      460
Gln Val Asn Ser Ser Thr Ser Ser Gln Phe Phe Pro Arg Pro Pro Pro
465      470      475      480
Gly Lys Pro Pro Thr Arg Pro Gly Val Glu Ala Arg Leu Arg Arg Tyr
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Lys Val Leu Gly Ser Ser Asn Ser Asp Ser Asp Leu Phe Ser Arg Leu
      500      505      510
Ala Gln Ile Leu Gln Asn Gly Ser Gln Lys Pro Arg Ser Thr Thr Gln
      515      520      525
Cys Lys Ser Pro Gly Ser Pro His Asn Pro Lys Thr Pro Pro Lys Ser
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Pro Val Val Pro Arg Arg Ser Pro Ser Ala Ser Pro Arg Ser Ser Ser
545      550      555      560
Leu Pro Arg Thr Ser Ser Ser Ser Pro Ser Arg Ala Gly Arg Pro His
      565      570      575
His Asp Gln Arg Ser Ser Ser Pro His Leu Gly Arg Ser Lys Ser Pro
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Pro Ser His Ser Gly Ser Ser Ser Ser Arg Arg Ser Cys Gln Gln Glu
      595      600      605
His Cys Lys Pro Ser Lys Asn Gly Leu Lys Gly Ser Gly Ser Leu His
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His His Ser Ala Ser Thr Lys Thr Pro Gln Gly Lys Ser Lys Pro Ala
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<211> 744

<212> DNA

<213> Homo sapiens

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<210> 2642
<211> 176
<212> PRT
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<400> 2642
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Val Thr Val Arg Ile His Gly Ser Met Leu Arg Ala His Arg Cys Val
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Leu Ala Ala Gly Ser Pro Phe Phe Gln Asp Lys Leu Leu Leu Gly Tyr
50 55 60
Ser Asp Ile Glu Ile Pro Ser Val Val Ser Val Gln Ser Val Gln Lys
65 70 75 80
Leu Ile Asp Phe Met Tyr Ser Gly Val Leu Arg Val Ser Gln Ser Glu
85 90 95
Ala Leu Gln Ile Leu Thr Ala Ala Ser Ile Leu Gln Ile Lys Thr Val
100 105 110
Ile Asp Glu Cys Thr Arg Ile Val Ser Gln Asn Val Gly Asp Val Phe
115 120 125
Pro Gly Ile Gln Asp Ser Gly Gln Asp Thr Pro Arg Gly Thr Pro Glu
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 <211> 4590
 <212> DNA
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<211> 871

<212> PRT

<213> Homo sapiens

<400> 2644

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Glu	Ile	Ile	Glu	Met	Leu	Ser	Lys	Asp	Gly	Phe	Trp	Asn	Ser	Asn	Phe
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Pro	Glu	Ser	Leu	Leu	Arg	Ser	Asp	Ile	Ala	Thr	Asn	Gly	Glu	Ser	Pro
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Thr	Glu	Cys	Lys	Ser	His	Glu	Leu	Lys	Arg	Gly	Leu	Ser	Pro	Val	Ser
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Tyr	Ser	Asp	His	Ser	Gln	Gln	Asp	Ser	Val	Gln	Glu	Gly	Glu	Lys	Pro
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Glu	Cys	Glu	Gln	Gly	Phe	Asp	Arg	Asn	Ala	Ser	Leu	Ser	Val	Tyr	Pro
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Lys	Thr	His	Thr	Gly	Tyr	Lys	Phe	Tyr	Val	Cys	Asn	Glu	Tyr	Gly	Thr
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Arg	His	Gln	Lys	Ile	His	Thr	Arg	Lys	Arg	Tyr	Glu	Cys	Ser	Lys	Cys
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Glu Pro Tyr Lys Cys Asn Glu Arg Gly Lys Ser Phe Arg His Asn Ser		400
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Thr Leu Lys Ile His Gln Arg Val His Ser Gly Glu Lys Pro Tyr Lys		
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Cys Ser Glu Cys Gly Lys Ala Phe His Arg His Thr His Leu Asn Glu		
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His Arg Arg Ile His Thr Gly Tyr Arg Pro His Lys Cys Gln Glu Cys		
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Val Arg Ser Phe Ser Arg Pro Ser His Leu Met Arg His Gln Ala Ile		
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His Thr Ala Glu Lys Pro Tyr Ser Cys Ala Glu Cys Lys Glu Thr Phe		
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Phe Val Ser Gly Lys Ile Leu Asp Gln Asn Pro Glu Gln Lys Glu Lys		
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Leu Thr Gln Tyr Glu Arg Ile His Thr Arg Gly Val Lys Pro Phe Glu		
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His Gln Arg Ile His Ser Arg Val Arg Leu Tyr Lys Trp Gly Glu Gln		
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Gly Lys Ala Ile Ser Ser Ala Ser Leu Ile Lys Leu Gln Ser Phe His		
625	630	635
Thr Lys Glu His Pro Phe Lys Cys Asn Glu Cys Gly Lys Thr Phe Ser		
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His Ser Ala His Leu Ser Lys His Gln Leu Ile His Ala Gly Glu Asn		
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Pro Phe Lys Cys Ser Lys Cys Asp Arg Val Phe Thr Gln Arg Asn Tyr		
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Asn Glu Cys Gly Lys Thr Phe Arg Gln Ser Ser Cys Leu Ser Lys His		
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Gln Arg Ile His Ser Gly Glu Lys Pro Tyr Val Cys Asp Tyr Cys Gly		
725	730	735
Lys Ala Phe Gly Leu Ser Ala Glu Leu Val Arg His Gln Arg Ile His		
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Thr Gly Glu Lys Pro Tyr Val Cys Gln Glu Cys Gly Lys Ala Phe Thr		
755	760	765
Gln Ser Ser Cys Leu Ser Ile His Arg Arg Val His Thr Gly Glu Lys		
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Pro Tyr Arg Cys Gly Glu Cys Gly Lys Ala Phe Ala Gln Lys Ala Asn		

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Leu Thr Gln His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Ser Cys						
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Asn Val Cys Gly Lys Ala Phe Val Leu Ser Ala His Leu Asn Gln His						
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Leu Arg Val His Thr Gln Glu Thr Leu Tyr Gln Cys Gln Arg Cys Gln						
	835			840		845
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<212> DNA

<213> Homo sapiens

<400> 2645

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Ala Arg Trp Glu His Lys Thr Arg Lys Leu Ser Arg Ala Phe Gly Ser
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Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Ile Thr Ile Leu Leu Leu Asn
      50           55           60
Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg
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Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr Ser Leu Gly Leu Ala Leu
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Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly
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Phe Ala Gly Thr Phe Leu Gly Asp Tyr Phe Gly Ile Leu Lys Glu Ala
      115          120          125
Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp
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Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro
      145          150          155          160
Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala
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Ser Gly Ser His Lys Arg Ser
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<212> PRT

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<400> 2648

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 65 70 75 80
 Ala Tyr Lys Asn Ala Met Thr Glu Leu Lys Lys Lys Ser His Phe Gly
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 Gly Pro Asp Tyr Glu Glu Gly Pro Asn Ser Leu Ile Asn Glu Glu Glu
 100 105 110
 Phe Phe Asp Ala Val Glu Ala Ala Leu Asp Arg Gln Asp Lys Ile Glu
 115 120 125
 Glu Gln Ser Gln Ser Glu Lys Val Arg Leu His Trp Pro Thr Ser Leu

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	165	170
Val Gly Gly Asp Ala Asn Trp Gln Leu Val Val Glu Glu Gly Glu Met		175
	180	185
Lys Val Tyr Arg Arg Glu Val Glu Glu Asn Gly Ile Val Leu Asp Pro		190
	195	200
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	245	250
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Tyr Leu Ser Val Ile Arg Lys Ile Pro Ala Leu Thr Glu Asn Asp Pro		270
	275	280
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<211> 1299

<212> DNA

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<210> 2650

<211> 428

<212> PRT

<213> Homo sapiens

<400> 2650

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Glu	Glu	Asp	Arg	Asp	Gly	Leu	Trp	Asp	Ala	Trp	Gly	Pro	Trp	Ser	Glu
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Cys	Ser	Arg	Thr	Cys	Gly	Gly	Gly	Ala	Ser	Tyr	Ser	Leu	Arg	Arg	Cys
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Leu	Ser	Ser	Lys	Ser	Cys	Glu	Gly	Arg	Asn	Ile	Arg	Tyr	Arg	Thr	Cys
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Cys	Ser	Ala	His	Asn	Asp	Val	Lys	His	His	Gly	Gln	Phe	Tyr	Glu	Trp
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Leu	Pro	Val	Ser	Asn	Asp	Pro	Asp	Asn	Pro	Cys	Ser	Leu	Lys	Cys	Gln
			115				120					125			
Ala	Lys	Gly	Thr	Thr	Leu	Val	Val	Glu	Leu	Ala	Pro	Lys	Val	Leu	Asp

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 Gly Thr Arg Cys Tyr Thr Glu Ser Leu Asp Met Cys Ile Ser Gly Leu
 145 150 155 160
 Cys Gln Ile Val Gly Cys Asp His Gln Leu Gly Ser Thr Val Lys Glu
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 Asp Asn Cys Gly Val Cys Asn Gly Asp Gly Ser Thr Cys Arg Leu Val
 180 185 190
 Arg Gly Gln Tyr Lys Ser Gln Leu Ser Ala Thr Lys Ser Asp Asp Thr
 195 200 205
 Val Val Ala Ile Pro Tyr Gly Ser Arg His Ile Arg Leu Val Leu Lys
 210 215 220
 Gly Pro Asp His Leu Tyr Leu Glu Thr Lys Thr Leu Gln Gly Thr Lys
 225 230 235 240
 Gly Glu Asn Ser Leu Ser Ser Thr Gly Thr Phe Leu Val Asp Asn Ser
 245 250 255
 Ser Val Asp Phe Gln Lys Phe Pro Asp Lys Glu Ile Leu Arg Met Ala
 260 265 270
 Gly Pro Leu Thr Ala Asp Phe Ile Val Lys Ile Arg Asn Ser Gly Ser
 275 280 285
 Ala Asp Ser Thr Val Gln Phe Ile Phe Tyr Gln Pro Ile Ile His Arg
 290 295 300
 Trp Arg Glu Thr Asp Phe Phe Pro Cys Ser Ala Thr Cys Gly Gly Gly
 305 310 315 320
 Tyr Gln Leu Thr Ser Ala Glu Cys Tyr Asp Leu Arg Ser Asn Arg Val
 325 330 335
 Val Ala Asp Gln Tyr Cys His Tyr Tyr Pro Glu Asn Ile Lys Pro Lys
 340 345 350
 Pro Lys Leu Gln Glu Cys Asn Leu Asp Pro Cys Pro Ala Ser Asp Gly
 355 360 365
 Tyr Lys Gln Ile Met Pro Tyr Asp Leu Tyr His Pro Leu Pro Arg Trp
 370 375 380
 Glu Ala Thr Pro Trp Thr Ala Cys Ser Ser Ser Cys Gly Gly Gly Ile
 385 390 395 400
 Gln Ser Pro Gly Ser Phe Leu Cys Gly Gly Gly His Pro Gly Ala Cys
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<210> 2651

<211> 628

<212> DNA

<213> Homo sapiens

<400> 2651

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<210> 2652

<211> 209

<212> PRT

<213> Homo sapiens

<400> 2652

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			20					25					30		
Leu	Asn	Leu	Ile	Phe	Ile	Val	Leu	Glu	Thr	Gly	Arg	Val	Thr	Lys	Thr
		35					40					45			
Lys	Asp	Gly	His	Glu	Val	Arg	Thr	Cys	Lys	Val	Ala	Asp	Lys	Thr	Gly
	50					55					60				
Ser	Ile	Asn	Ile	Ser	Val	Trp	Asp	Asp	Val	Gly	Asn	Leu	Ile	Gln	Pro
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Gly	Asp	Ile	Ile	Arg	Leu	Thr	Lys	Gly	Tyr	Ala	Ser	Val	Phe	Lys	Gly
			85						90					95	
Cys	Leu	Thr	Leu	Tyr	Thr	Gly	Arg	Gly	Gly	Asp	Leu	Gln	Lys	Ile	Gly
			100					105					110		
Glu	Phe	Cys	Met	Asp	Tyr	Ser	Glu	Val	Pro	Asn	Phe	Ser	Glu	Pro	Asn
		115					120					125			
Pro	Glu	Tyr	Ser	Thr	Gln	Gln	Ala	Pro	Asn	Lys	Ala	Val	Gln	Asn	Asp
	130					135					140				
Ser	Asn	Pro	Ser	Ala	Ser	Gln	Pro	Thr	Thr	Gly	Pro	Ser	Ala	Ala	Ser
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Pro	Ala	Ser	Glu	Asn	Gln	Asn	Gly	Asn	Gly	Met	Ser	Ala	Pro	Pro	Gly
			165						170					175	
Phe	Arg	Val	Val	Ala	His	Ile	Pro	Leu	Ile	Leu	Pro	Pro	Thr	His	Pro
			180					185					190		
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<210> 2653

<211> 2103

<212> DNA

<213> Homo sapiens

<400> 2653

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360
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 1920
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 1980
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 2103

<210> 2654

<211> 70

<212> PRT

<213> Homo sapiens

<400> 2654

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Ser	Glu	Val	Asn	Phe	Leu	Arg	Phe	Glu	Cys	Cys	Phe	Lys	Thr	Leu	Ser
		20						25				30			
Ser	Asp	Ser	Lys	Cys	Leu	Leu	Leu	Gly	Ala	Val	Ala	His	Ala	Cys	
		35				40				45					
Asn	Pro	Ser	Thr	Leu	Gly	Gly	Arg	Gly	Gly	Arg	Ile	Thr	Arg	Ser	Gly
	50					55					60				
Asp	Arg	Asp	Tyr	Pro	Gly										
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<210> 2655

<211> 1752

<212> DNA

<213> Homo sapiens

<400> 2655

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 180
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 240
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 300
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 360

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1752

<210> 2656

<211> 493

<212> PRT

<213> Homo sapiens

<400> 2656
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Arg Cys Leu Leu Met Pro Gln Cys Asn Ala Phe Leu Ser Lys Ile Met
35 40 45
Thr Ser Leu Leu Ser Pro Pro His Arg Arg Pro Thr Leu His Arg Arg
50 55 60
Pro Thr Leu Pro Tyr Arg Thr Trp Glu Ala Ala Leu Arg Gln Lys Val
65 70 75 80
Gln Gln Trp Tyr Thr Ala Val Gly Gln Thr Glu Asn Pro Asp Asn Cys
85 90 95
Ala Glu Lys Leu Gly Leu Cys Pro Gln Phe Phe Lys Val Leu Gly Glu
100 105 110
Val Asn Pro Leu Glu Glu Lys Pro Phe His Glu Leu Pro Phe Tyr Gln
115 120 125
Lys Val Trp Leu Leu Lys Gly Leu Cys Asp Phe Val Tyr Asp Thr His
130 135 140
Lys Glu Val Gln Asp Ala Val Leu Gly Gln Pro Ile His Glu Cys Arg
145 150 155 160
Ala Val Ile Leu Arg Tyr Asp Tyr Leu Glu Thr Ala Tyr Val His Phe
165 170 175
Pro Gln Phe Cys Gly Ala Asp Val Arg Ile Tyr Lys Gln Arg Pro Phe
180 185 190
Gln Ala Pro Glu Phe Pro Ile Pro Pro Ile Lys Ile Gln Arg Val Pro
195 200 205
Arg Ile Lys Leu Glu Lys Leu Lys Cys Asp Tyr Val Ser Thr Ser Asn
210 215 220
Gly Glu His Arg Cys Ser Arg Asp Ser Leu Pro Ser Ser Phe Lys Lys
225 230 235 240
Glu Gln Glu Asn Asn Phe Asp Pro Ala Cys Cys Pro Ala Lys Met Ile
245 250 255
Leu Asp Asn His Asp Ile Ser Val Glu Met Gly Val Lys Ser Asn Tyr
260 265 270
Glu Ile Arg Ile Arg Arg Pro Cys Glu Ile Lys Lys Thr Asp Cys Cys
275 280 285
Lys Glu Asn Leu Glu Lys Pro Arg Ser Pro Gly Glu Val Thr Gly Phe
290 295 300
Gly Glu Pro Leu Ser Pro Gly Glu Ile Arg Phe Ile Glu Asn Gln Glu
305 310 315 320
Lys Tyr Gly Glu Ala Ser Arg Ile Lys Ile Glu Pro Ser Pro Leu Lys
325 330 335
Glu Asn Thr Leu Lys Ser Cys Gln Ile His Val Asn Gly Ser His Ser
340 345 350
Asp His Pro Glu Ile Asn Cys His Lys Val Val Arg Asp Ile Leu Leu
355 360 365
Glu Gln Ser Leu Gln Ser His Lys Lys Leu Lys Leu Thr Lys Met Arg
370 375 380
Ala Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Asp Val Leu Asn
385 390 395 400
Glu Asn Leu Gln Arg Lys Arg Glu Gly Leu His Ser Leu Ala Phe Lys
405 410 415
Ser Tyr Lys Pro Glu Ile Gln Asn Lys Leu Leu Ile Ile Lys Lys Lys

420 425 430
 Ala Lys His Lys Lys His Lys Ser Gly Lys Lys Ser Val Ser Lys Lys
 435 440 445
 Ala Ile Thr Lys Lys Arg Lys Thr Val Ile Lys Ser Pro Thr Val Pro
 450 455 460
 Glu Phe Gln Leu Ile Cys Thr Asn Leu Asp Glu Leu Arg Glu Leu Ile
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 Thr Lys Ile Glu Asn Glu Leu Lys Asp Leu Glu Lys Lys
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<210> 2657

<211> 972

<212> DNA

<213> Homo sapiens

<400> 2657

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<210> 2658

<211> 76

<212> PRT

<213> Homo sapiens

<400> 2658

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      20           25           30
Leu Trp Gly Gly Ala Gly Glu Arg Gly Cys Gln Ala Trp Ala Ala Ala
      35           40           45
Asp Leu Gly Gly His Gly Gly Ser Met Pro Ser Thr Ala Gly Trp Gly
      50           55           60
Ala Leu Pro Gly Pro Ala Pro Ser Met His Gly Trp
      65           70           75

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<210> 2659

<211> 691

<212> DNA

<213> Homo sapiens

<400> 2659

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<210> 2660

<211> 120

<212> PRT

<213> Homo sapiens

<400> 2660

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Thr Phe Lys Arg Ile Gly Pro Pro Leu Glu Lys Pro Val Glu Lys Val

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<400> 2661
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<210> 2662

<211> 415

<212> PRT

<213> Homo sapiens

<400> 2662

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			20					25					30		
Lys	Leu	Glu	Met	Lys	Ala	Leu	Arg	Glu	Leu	Asp	Arg	Phe	Ser	Val	Leu
			35				40					45			
Asn	Ser	Gln	His	Met	Phe	Glu	Val	Leu	Ala	Ala	Met	Asn	His	Arg	Ser
			50			55					60				
Leu	Ile	Leu	Leu	Asp	Glu	Cys	Ser	Lys	Val	Val	Leu	Asp	Asn	Ile	His
65				70					75					80	
Gly	Cys	Pro	Leu	Arg	Ile	Met	Ile	Asn	Ile	Leu	Gln	Ser	Cys	Lys	Asp
			85					90						95	
Leu	Gln	Tyr	His	Asn	Leu	Asp	Leu	Phe	Lys	Gly	Leu	Ala	Asp	Tyr	Val
			100					105					110		
Ala	Ala	Thr	Phe	Asp	Ile	Trp	Lys	Phe	Arg	Lys	Val	Leu	Phe	Ile	Leu
			115				120					125			
Ile	Leu	Phe	Glu	Asn	Leu	Gly	Phe	Arg	Pro	Val	Gly	Leu	Met	Asp	Leu
			130			135					140				
Phe	Met	Lys	Arg	Ile	Val	Glu	Asp	Pro	Glu	Ser	Leu	Asn	Met	Lys	Asn
145				150					155					160	
Ile	Leu	Ser	Ile	Leu	His	Thr	Tyr	Ser	Ser	Leu	Asn	His	Val	Tyr	Lys
			165					170						175	
Cys	Gln	Asn	Lys	Glu	Gln	Phe	Val	Glu	Val	Met	Ala	Ser	Ala	Leu	Thr
			180					185					190		
Gly	Tyr	Leu	His	Thr	Ile	Ser	Ser	Glu	Asn	Leu	Leu	Asp	Ala	Val	Tyr
			195				200					205			
Ser	Phe	Cys	Leu	Met	Asn	Tyr	Phe	Pro	Leu	Ala	Pro	Phe	Asn	Gln	Leu
			210			215					220				
Leu	Gln	Lys	Asp	Ile	Ile	Ser	Glu	Leu	Leu	Thr	Ser	Asp	Asp	Met	Lys
225				230				235						240	
Asn	Ala	Tyr	Lys	Leu	His	Thr	Leu	Asp	Thr	Cys	Leu	Lys	Leu	Asp	Asp
			245					250						255	
Thr	Val	Tyr	Leu	Arg	Asp	Ile	Ala	Leu	Ser	Leu	Pro	Gln	Leu	Pro	Arg

260 265 270
 Glu Leu Pro Ser Ser His Thr Asn Ala Lys Val Ala Glu Val Leu Ser
 275 280 285
 Ser Leu Leu Gly Gly Glu Gly His Phe Ser Lys Asp Val His Leu Pro
 290 295 300
 His Asn Tyr His Ile Asp Phe Glu Ile Arg Met Asp Thr Asn Arg Asn
 305 310 315 320
 Gln Val Leu Pro Leu Ser Asp Val Asp Thr Thr Ser Ala Thr Asp Ile
 325 330 335
 Gln Arg Val Ala Val Leu Cys Val Ser Arg Ser Ala Tyr Cys Leu Gly
 340 345 350
 Ser Ser His Pro Arg Gly Phe Leu Ala Met Lys Met Arg His Leu Asn
 355 360 365
 Ala Met Gly Phe His Val Ile Leu Val Asn Asn Trp Glu Met Asp Lys
 370 375 380
 Leu Glu Met Glu Asp Ala Val Thr Phe Leu Lys Thr Lys Ile Tyr Ser
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 Val Glu Ala Leu Pro Val Ala Ala Val Asn Val Gln Ser Thr Gln
 405 410 415

<210> 2663

<211> 1024

<212> DNA

<213> Homo sapiens

<400> 2663

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 180
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 240
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 300
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 420
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 780
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 1024

<210> 2664
 <211> 199
 <212> PRT
 <213> Homo sapiens

<400> 2664
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 Ala Arg Trp Glu His Lys Thr Arg Lys Leu Ser Arg Ala Phe Gly Ser
 35 40 45
 Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Val Thr Ile Leu Leu Leu Asn
 50 55 60
 Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg
 65 70 75 80
 Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr Ser Leu Gly Leu Ala Leu
 85 90 95
 Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly
 100 105 110
 Phe Ala Gly Thr Phe Leu Gly Asp Tyr Phe Gly Ile Leu Lys Glu Ala
 115 120 125
 Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp
 130 135 140
 Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro
 145 150 155 160
 Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala
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 Leu Leu Tyr Glu Glu Pro Phe Thr Ala Glu Ile Tyr Arg Gln Lys Ala
 180 185 190
 Ser Gly Ser His Lys Arg Ser
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<210> 2665
 <211> 720
 <212> DNA
 <213> Homo sapiens

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 120
 gcgccaatgc gaagcggtgc agtcgcttga ctcacctgag gctctccaag gataccttca
 180

atgcctgcac tgtaaggag ctgcttttcc cgggtgctgg cgagaacgga agccttcctt
 240
 tgacgttttt ctaaacaagg gatgcagtct gtgcagcctg cagaagcaag aggagcagta
 300
 caaattactt atgaagtttg tcaggtcaac ggcagagact tatccagagc aactcatgac
 360
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 420
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 480
 caaacgaca tcaccttga acatatcatg gccctcacta agatgtcctc tcccagccca
 540
 cccgtgctgg atccctatct cttgccagag gagcatccct cagcccatga atactacgat
 600
 ccaaatgact acattggaga catccatcag gagatggaca gggaggagct ggagctggag
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<210> 2666

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2666

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Tyr	Glu	Val	Cys	Gln	Val	Asn	Gly	Arg	Asp	Leu	Ser	Arg	Ala	Thr	His
			20				25					30			
Asp	Gln	Ala	Val	Glu	Ala	Phe	Lys	Thr	Ala	Lys	Glu	Pro	Ile	Val	Val
		35					40					45			
Gln	Val	Leu	Arg	Arg	Thr	Pro	Arg	Thr	Lys	Met	Phe	Thr	Pro	Pro	Ser
	50					55					60				
Glu	Ser	Gln	Leu	Val	Asp	Thr	Gly	Thr	Gln	Thr	Asp	Ile	Thr	Phe	Glu
65					70				75					80	
His	Ile	Met	Ala	Leu	Thr	Lys	Met	Ser	Ser	Pro	Ser	Pro	Pro	Val	Leu
			85					90						95	
Asp	Pro	Tyr	Leu	Leu	Pro	Glu	Glu	His	Pro	Ser	Ala	His	Glu	Tyr	Tyr
			100					105					110		
Asp	Pro	Asn	Asp	Tyr	Ile	Gly	Asp	Ile	His	Gln	Glu	Met	Asp	Arg	Glu
		115					120					125			
Glu	Leu	Glu	Leu	Glu	Glu	Val	Asp	Leu	Tyr	Arg	Met	Asn	Ser	Gln	Asp
	130					135					140				
Lys	Leu	Gly	Leu	Thr	Val	Cys	Tyr	Arg							
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<210> 2667

<211> 289

<212> DNA

<213> Homo sapiens

<400> 2667

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 120
 tgggtgccag gcctatgttg gaggacaaga catttcaaag aaagtattaa attcattcac
 180
 gagtgccggc tccgcgggga gagctgcctt gtacactgcc tggccggggg ctccaggagc
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 289

<210> 2668

<211> 96

<212> PRT

<213> Homo sapiens

<400> 2668

Xaa	Met	Gly	Asn	Gly	Met	Asn	Lys	Ile	Leu	Pro	Gly	Leu	Tyr	Ile	Gly
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Asn	Phe	Lys	Asp	Ala	Arg	Asp	Ala	Glu	Gln	Leu	Ser	Lys	Asn	Lys	Gly
			20					25					30		
Asn	Pro	Phe	Ser	Val	Cys	Pro	Arg	Trp	Val	Pro	Gly	Leu	Cys	Trp	Arg
			35				40					45			
Thr	Arg	His	Phe	Lys	Glu	Ser	Ile	Lys	Phe	Ile	His	Glu	Cys	Arg	Leu
	50					55				60					
Arg	Gly	Glu	Ser	Cys	Leu	Val	His	Cys	Leu	Ala	Gly	Val	Ser	Arg	Ser
65				70					75				80		
Val	Thr	Leu	Val	Ile	Ala	Tyr	Ile	Met	Thr	Val	Thr	Asp	Phe	Gly	Trp
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<210> 2669

<211> 4285

<212> DNA

<213> Homo sapiens

<400> 2669

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 240
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 420
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 480
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780
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<210> 2670

<211> 979

<212> PRT

<213> Homo sapiens

<400> 2670

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Asp	Glu	Gln	Ser	Val	Glu	Ser	Ile	Ala	Glu	Val	Phe	Arg	Cys	Phe	Ile
			20					25					30		
Cys	Met	Glu	Lys	Leu	Arg	Asp	Ala	Arg	Leu	Cys	Pro	His	Cys	Ser	Lys
	35						40					45			
Leu	Cys	Cys	Phe	Ser	Cys	Ile	Arg	Arg	Trp	Leu	Thr	Glu	Gln	Arg	Ala
	50					55					60				
Gln	Cys	Pro	His	Cys	Arg	Ala	Pro	Leu	Gln	Leu	Arg	Glu	Leu	Val	Asn
65					70					75				80	
Cys	Arg	Trp	Ala	Glu	Val	Thr	Gln	Gln	Leu	Asp	Thr	Leu	Gln	Leu	
			85					90					95		
Cys	Ser	Leu	Thr	Lys	His	Glu	Glu	Asn	Glu	Lys	Asp	Lys	Cys	Glu	Asn
			100					105					110		
His	His	Glu	Lys	Leu	Ser	Val	Phe	Cys	Trp	Thr	Cys	Lys	Lys	Cys	Ile
		115					120					125			
Cys	His	Gln	Cys	Ala	Leu	Trp	Gly	Gly	Met	His	Gly	Gly	His	Thr	Phe
	130					135					140				
Lys	Pro	Leu	Ala	Glu	Ile	Tyr	Glu	Gln	His	Val	Thr	Lys	Val	Asn	Glu
145					150					155				160	
Glu	Val	Ala	Lys	Leu	Arg	Arg	Arg	Leu	Met	Glu	Leu	Ile	Ser	Leu	Val
			165					170						175	
Gln	Glu	Val	Glu	Arg	Asn	Val	Glu	Ala	Val	Arg	Asn	Ala	Lys	Asp	Glu
			180					185					190		
Arg	Val	Arg	Glu	Ile	Arg	Asn	Ala	Val	Glu	Met	Met	Ile	Ala	Arg	Leu
		195				200						205			
Asp	Thr	Gln	Leu	Lys	Asn	Lys	Leu	Ile	Thr	Leu	Met	Gly	Gln	Lys	Thr
	210					215						220			
Ser	Leu	Thr	Gln	Glu	Thr	Glu	Leu	Leu	Glu	Ser	Leu	Leu	Gln	Glu	Val
225					230					235				240	
Glu	His	Gln	Leu	Arg	Ser	Cys	Ser	Lys	Ser	Glu	Leu	Ile	Ser	Lys	Ser

1913

675 680 685
 Met Leu Lys Arg Leu Lys Thr Gln Met Ala Gly Val Arg Cys Met Lys
 690 695 700
 Thr Asp Val Lys Asn Thr Leu Ser Glu Ile Lys Ser Ser Ser Ala Ala
 705 710 715 720
 Ser Gly Asp Met Gln Thr Ser Leu Phe Ser Ala Asp Gln Ala Ala Leu
 725 730 735
 Ala Ala Cys Gly Thr Glu Asn Ser Gly Arg Leu Gln Asp Leu Gly Met
 740 745 750
 Glu Leu Leu Ala Lys Ser Ser Val Ala Asn Cys Tyr Ile Arg Asn Ser
 755 760 765
 Thr Asn Lys Lys Ser Asn Ser Pro Lys Pro Ala Arg Ser Ser Val Ala
 770 775 780
 Gly Ser Leu Ser Leu Arg Arg Ala Val Asp Pro Gly Glu Asn Ser Arg
 785 790 795 800
 Ser Lys Gly Asp Cys Gln Thr Leu Ser Glu Gly Ser Pro Gly Ser Ser
 805 810 815
 Gln Ser Gly Ser Arg His Ser Ser Pro Arg Ala Leu Ile His Gly Ser
 820 825 830
 Ile Gly Asp Ile Leu Pro Lys Thr Glu Asp Arg Gln Cys Lys Ala Leu
 835 840 845
 Asp Ser Asp Ala Val Val Val Ala Val Phe Ser Gly Leu Pro Ala Val
 850 855 860
 Glu Lys Arg Arg Lys Met Val Thr Leu Gly Ala Asn Ala Lys Gly Gly
 865 870 875 880
 His Leu Glu Gly Leu Gln Met Thr Asp Leu Glu Asn Asn Ser Glu Thr
 885 890 895
 Gly Glu Leu Gln Pro Val Leu Pro Glu Gly Ala Ser Ala Ala Pro Glu
 900 905 910
 Glu Gly Met Ser Ser Asp Ser Asp Ile Glu Cys Asp Thr Glu Asn Glu
 915 920 925
 Glu Gln Glu Glu His Thr Ser Val Gly Gly Phe His Asp Ser Phe Met
 930 935 940
 Val Met Thr Gln Pro Pro Asp Glu Asp Thr His Ser Ser Phe Pro Asp
 945 950 955 960
 Gly Glu Gln Ile Gly Pro Glu Asp Leu Ser Phe Asn Thr Asp Glu Asn
 965 970 975
 Ser Gly Arg

<210> 2671

<211> 814

<212> DNA

<213> Homo sapiens

<400> 2671

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 120
 gggccccggc tgaggggtgcg cgcgcagcac cccgggaagg tgggggggag gcggtggcgg
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 660
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<210> 2672

<211> 223

<212> PRT

<213> Homo sapiens

<400> 2672

Met	Gly	Ala	Arg	Arg	Gln	Pro	Arg	Ala	Pro	Ala	Pro	Gly	Pro	Arg	Leu	1	5	10	15
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Lys	Asp	Ser	Arg	Ala	Val	Ser	Arg	His	Gly	Arg	Gly	Asn	Cys	Gly	Ala	35	40	45	
Phe	Ala	Ile	Leu	Ser	Pro	Ser	Pro	Tyr	Leu	Arg	Pro	Arg	Gly	Arg	Ala	50	55	60	
His	His	Pro	Pro	Ser	Arg	Leu	Gly	Gly	Gly	Arg	Ala	Pro	Ser	Trp	Pro	65	70	75	80
Pro	Pro	Ser	Arg	Pro	Leu	Asn	Ser	Pro	Gly	Asp	Cys	Gly	Tyr	Cys	His	85	90	95	
Arg	Leu	Ala	Ser	Thr	Ala	Ser	Ser	Arg	Ser	Thr	Gln	Met	Arg	Thr	Val	100	105	110	
Gly	Gly	Lys	Lys	Gly	Asp	Ala	Thr	Pro	Ser	Glu	Pro	Pro	Leu	Pro	Leu	115	120	125	
Pro	Arg	Pro	Xaa	Pro	Lys	Trp	Pro	Pro	Pro	Ser	Arg	Pro	Pro	Pro	Pro	130	135	140	
Pro	Leu	Pro	Pro	Pro	Leu	Ala	Arg	Asn	Arg	Tyr	Arg	Arg	Arg	Gly	Pro	145	150	155	160
Ser	Ser	Arg	Glu	Arg	Gln	Ser	Pro	Ser	Lys	Leu	Gln	Gln	Val	Ser	Ser	165	170	175	
Gly	Thr	Trp	Ala	Ser	Arg	Phe	Pro	Trp	Gln	Pro	Thr	Ser	Val	Ala	Leu	180	185	190	
Leu	Arg	Phe	Thr	Arg	Gly	Trp	Phe	Pro	Asp	Ser	Phe	Gln	Thr	Pro	Leu	195	200	205	
Pro	Ser	Leu	Arg	Lys	Leu	Ser	Arg	Leu	Arg	Ile	Pro	Leu	Arg	Ile					

210 215 220

<210> 2673
 <211> 5035
 <212> DNA
 <213> Homo sapiens

<400> 2673
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<210> 2674

<211> 690

<212> PRT

<213> Homo sapiens

<400> 2674

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Arg	Arg	Glu	Ile	Glu	Asp	Lys	Leu	Lys	Gln	Glu	Glu	Glu	Thr	Leu	Ser
			20					25					30		
Phe	Ile	Arg	Asp	Ser	Leu	Glu	Lys	Ser	Asp	Gln	Leu	Thr	Lys	Asn	Met
		35					40					45			
Val	Ser	Ile	Leu	Ser	Ser	Phe	Glu	Ser	Arg	Leu	Met	Lys	Leu	Glu	Asn
	50					55				60					
Ser	Ile	Ile	Pro	Val	His	Lys	Gln	Thr	Glu	Asn	Leu	Gln	Arg	Leu	Gln
65				70					75					80	
Glu	Asn	Val	Glu	Lys	Thr	Leu	Ser	Cys	Leu	Asp	His	Val	Ile	Ser	Tyr
			85					90					95		
Tyr	His	Val	Ala	Ser	Asp	Thr	Glu	Lys	Ile	Ile	Arg	Glu	Gly	Pro	Thr
			100					105					110		
Gly	Arg	Leu	Glu	Glu	Tyr	Leu	Gly	Ser	Met	Ala	Lys	Ile	Gln	Lys	Ala
		115				120						125			
Val	Glu	Tyr	Phe	Gln	Asp	Asn	Ser	Pro	Asp	Ser	Pro	Glu	Leu	Asn	Lys
	130					135					140				
Val	Lys	Leu	Leu	Phe	Glu	Arg	Gly	Lys	Glu	Ala	Leu	Glu	Ser	Glu	Phe
145				150					155					160	
Arg	Ser	Leu	Met	Thr	Arg	His	Ser	Lys	Val	Val	Ser	Pro	Val	Leu	Ile
			165					170						175	
Leu	Asp	Leu	Ile	Ser	Gly	Asp	Asp	Asp	Leu	Glu	Ala	Gln	Glu	Asp	Val
		180						185					190		
Thr	Leu	Glu	His	Leu	Pro	Glu	Ser	Val	Leu	Gln	Asp	Val	Ile	Arg	Ile
	195					200						205			
Ser	Arg	Trp	Leu	Val	Glu	Tyr	Gly	Arg	Asn	Gln	Asp	Phe	Met	Asn	Val
	210					215					220				
Tyr	Tyr	Gln	Ile	Arg	Ser	Ser	Gln	Leu	Asp	Arg	Ser	Ile	Lys	Gly	Leu
225				230						235				240	
Lys	Glu	His	Phe	His	Lys	Ser	Ser	Ser	Ser	Ser	Gly	Val	Pro	Tyr	Ser
			245					250						255	
Pro	Ala	Ile	Pro	Asn	Lys	Arg	Lys	Asp	Thr	Pro	Thr	Lys	Lys	Pro	Val

1920

690

<210> 2675

<211> 711

<212> DNA

<213> Homo sapiens

<400> 2675

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<210> 2676

<211> 180

<212> PRT

<213> Homo sapiens

<400> 2676

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Trp Gln Gln Trp Glu Ser Leu Arg Phe Gly Glu Tyr Gly Asp Pro Leu
20     25     30
Gln Cys Gly Ala Trp Val Gly Gln Cys Ala Leu Tyr Ile Val Ile Met
35     40     45
Ile Phe Glu Lys Ser Val Val Phe Ile Val Leu Leu Leu Leu Gln Trp
50     55     60
Lys Lys Val Ala Leu Leu Asn Pro Ile Glu Asn Pro Asp Leu Lys Leu
65     70     75     80
Ala Ile Val Met Leu Ile Val Pro Phe Phe Val Asn Ala Leu Met Phe
85     90     95
Trp Val Val Asp Asn Phe Leu Met Arg Lys Gly Lys Thr Lys Ala Lys
100    105    110
Leu Glu Glu Arg Gly Ala Asn Gln Asp Ser Arg Asn Gly Ser Lys Val

```

```

      115              120              125
Arg Tyr Arg Arg Ala Ala Ser His Glu Glu Ser Glu Ser Glu Ile Leu
      130              135              140
Ile Ser Ala Asp Asp Glu Met Glu Glu Ser Asp Val Glu Glu Asp Leu
      145              150              155              160
Arg Arg Leu Thr Pro Leu Lys Pro Val Lys Lys Lys Lys His Arg Phe
      165              170              175
Gly Leu Pro Val
      180

```

<210> 2677

<211> 735

<212> DNA

<213> Homo sapiens

<400> 2677

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<210> 2678

<211> 170

<212> PRT

<213> Homo sapiens

<400> 2678

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Leu Ala Ala Leu Ser Ala Ala Trp Gly Arg Asp Gly Gln Val His Gly
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Pro Ala Cys Val Ser Thr Pro Pro Ser Ala Gly Ala Phe Ser Leu Leu
      20              25              30
Arg Glu Asn Phe Ser His Ala Pro Ser Pro Asp Met Ser Ala Ala Ser

```

```

      35              40              45
Leu Cys Ala Leu Glu Gln Leu Met Met Ala Gln Ala Gln Glu Cys Val
  50              55              60
Phe Glu Gly Leu Ser Pro Pro Ala Ser Met Ala Pro Gln Asp Cys Leu
  65              70              75              80
Ala Gln Leu Arg Leu Ala Gln Glu Ala Ala Gln Val Ser Ser Gly Thr
      85              90              95
Arg Val Arg Met Gln Gly Val Gly Pro Ser Trp Gly Gln Ser Pro Gly
      100              105              110
Pro Gly Met Arg Glu Leu Ser His Leu Leu Pro Cys Val Ser Ala Pro
      115              120              125
Ser Gln Leu Leu Ser Cys Ser Leu Gly Gly Leu Val Arg Asn Leu Gly
      130              135              140
Thr Arg Ala Ser Ala Ser Arg Glu Trp His Lys Ala Ala Gly Thr Glu
  145              150              155              160
Val Pro Gly Arg Leu Leu Gly Trp Trp Ser
      165              170

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<210> 2679
 <211> 560
 <212> DNA
 <213> Homo sapiens

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<400> 2679
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  120
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  180
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  240
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  300
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  360
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  420
ttccagaggt ccaggaagca cctgtcaatg tggaagtcag aatgctcagg ccaaataccg
  480
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<210> 2680
 <211> 133
 <212> PRT
 <213> Homo sapiens

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<400> 2680
Met Glu Leu Ile Pro Gln Asp Ala Ser Pro His Arg Arg Ala Asp Pro
  1              5              10              15
Arg Glu Thr Cys His Gln Asp Thr Ala Arg Ser Ser Lys Gly Ala Ser

```

```

      20      25      30
Met Leu Cys Ala Ala Ala Arg Leu Cys Pro Glu Glu Ser Gln Gly Thr
      35      40      45
Leu Val Ser Ala Ala Ala Ser Arg Pro Trp Met Ala Arg Cys Ala
      50      55      60
Val Gly Arg His Arg Gly Cys Thr Arg Thr Gln Pro Asp Leu Gly Gln
      65      70      75      80
Phe Ala Pro Thr Leu Leu His Ser Arg Gly Pro Gly Ser Thr Cys Gln
      85      90      95
Cys Gly Ser Gln Asn Ala Gln Ala Lys Tyr Arg Asp Gln Leu Thr Ile
      100      105      110
Gln Val Glu Pro Glu Ala Trp Ala Gly Ala Ser Asn Cys Pro Pro Val
      115      120      125
Arg Leu Arg Asp Ala
      130

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<210> 2681

<211> 585

<212> DNA

<213> Homo sapiens

<400> 2681

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120
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180
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300
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360
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420
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480
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<210> 2682

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2682

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Met Asp Glu Gln Lys Lys Arg Asp Glu Pro Leu Val Leu Lys Thr Asn
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Leu Glu Arg Cys Pro Ala Arg Leu Ser Asp Ser Glu Asn Glu Glu Pro
      20      25      30
Ser Arg Gly Gln Met Thr Gln Thr His Arg Ser Ala Phe Val Ser Lys

```


35	40	45
Asn Asn Ser Tyr Ser Leu Ala Phe Leu Ala Gly Lys Leu Asn Ser Lys		
50	55	60
Val Glu Arg Ser Gln Ser Cys Ser Asp Thr Ala Gln Glu Arg Ala Lys		
65	70	75
Ser Arg Val Arg Ala Val Pro Gly Asn Lys Ala Lys Val His Leu Ser		80
85	90	95
His Arg Pro Pro Gly Leu Val Arg Leu Ala Pro Ser Pro Pro Leu His		
100	105	110
Met Val Met Lys		
115		

<210> 2683

<211> 498

<212> DNA

<213> Homo sapiens

<400> 2683

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 gtctgtcttt tcctggca
 498

<210> 2684

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2684

Met Ala Asn Ile Thr Trp Met Ala Asn His Thr Gly Arg Leu Asp Phe		
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Ile Leu Met Gly Leu Phe Arg Arg Ser Lys His Pro Ala Leu Leu Ser		15
20	25	30
Val Val Ile Phe Val Val Phe Leu Met Ala Leu Ser Glu Asn Ala Val		
35	40	45
Leu Ile Leu Leu Ile His Cys Asp Thr Tyr Leu His Thr Pro Met Tyr		
50	55	60
Phe Phe Ile Ser Gln Leu Ser Leu Met Asp Met Ala Tyr Ile Ser Val		
65	70	75
Thr Val Pro Lys Met Leu Leu Asp Gln Val Met Gly Val Asn Lys Ile		80

```

      85              90              95
Ser Ala Pro Glu Cys Gly Met Gln Met Phe Leu Tyr Leu Thr Leu Ala
      100              105              110
Gly Ser Glu Phe Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Tyr Val
      115              120              125
Ala Ile Cys His Pro Leu Arg Tyr Pro Val Leu Met Asn His Arg Val
      130              135              140
Cys Leu Phe Leu Ala
145

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<210> 2685

<211> 391

<212> DNA

<213> Homo sapiens

<400> 2685

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120
ctctacctca caggcaaccg actgcgaagc cgggccctgg gccccctgct ctgggtggac
180
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240
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300
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<210> 2686

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2686

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Leu Lys Val Lys Arg Asn Glu Leu Ala Ala Leu Ala Arg Gly Ala Leu
20     25     30
Ala Gly Met Ala Gln Leu Arg Glu Leu Tyr Leu Thr Gly Asn Arg Leu
35     40     45
Arg Ser Arg Ala Leu Gly Pro Arg Ala Trp Val Asp Leu Ala His Leu
50     55     60
Gln Leu Leu Asp Ile Ala Gly Asn Gln Leu Thr Glu Ile Pro Glu Gly
65     70     75     80
Leu Pro Pro Ser Leu Glu Tyr Leu Tyr Leu Gln Asn Asn Lys Ile Ser
85     90     95
Ala Val Pro Ala Ser Ala Phe Asp Ser Thr Pro Asn Leu Lys Gly Ile
100    105    110
Phe Leu Arg Phe Asn Lys Leu Ala Val Gly Ser Val Val Glu Ser Ala
115    120    125
Phe Arg

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130

<210> 2687

<211> 399

<212> DNA

<213> Homo sapiens

<400> 2687

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 120
 tgggaaatga caggtaagac agggactaca aaagaccaag cagacaataa aattccccct
 180
 gacagtccgc taggccttat gttaagatac cggaagata atgaaaggac caaacacaag
 240
 aaaagacagc aaatgataaa atattgctgg tttatttgga ctaaggaacc catcctgaaa
 300
 cctttggtct tttggccaca gttaggggtg agcggggact ggatatgcca actcctaate
 360
 cagtatgtaa aggataaaag tccagtttct caagaggag
 399

<210> 2688

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2688

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Pro	Pro	Asp	Ser	Pro	Leu	Gly	Leu	Met	Leu	Arg	Tyr	Arg	Lys	Asp	Asn
		20					25					30			
Glu	Arg	Thr	Lys	His	Lys	Lys	Arg	Gln	Gln	Met	Ile	Lys	Tyr	Cys	Trp
	35					40					45				
Phe	Ile	Trp	Thr	Lys	Glu	Pro	Ile	Leu	Lys	Pro	Leu	Val	Phe	Trp	Pro
	50				55			60							
Gln	Leu	Gly	Leu	Ser	Gly	Asp	Trp	Ile	Cys	Gln	Leu	Leu	Ile	Gln	Tyr
65				70			75						80		
Val	Lys	Asp	Lys	Ser	Pro	Val	Ser	Gln	Glu						
			85				90								

<210> 2689

<211> 560

<212> DNA

<213> Homo sapiens

<400> 2689

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 120
 tcaaactcct ggcctcaaga aatcctcctg gttcagcctc acaaagctcc gagattacag
 180

ttgcatgtct gtgacaagct tggaggccga gttgcaagct aagatccaag agagccatcc
 240
 tgaattgcga cgcgtgtact tcaataaggg attgtaaagc agggaggaaa cctctgcagc
 300
 tcattctgcc actgcaaagc tgggttagcc atgctgggtga gaaaaatcct gttcaacctg
 360
 ggttggtata tcgtctttga aaaacaatga ctataaaagc tacaggaaag gtatttcagg
 420
 acgtttattg aaggcattgg tggagctctc tgtatgtgtt ttgctctgca gggaactcaa
 480
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<210> 2690

<211> 73

<212> PRT

<213> Homo sapiens

<400> 2690

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 20 25 30
 Leu Thr Lys Leu Pro Arg Leu Val Ser Asn Ser Trp Pro Gln Glu Ile
 35 40 45
 Leu Leu Val Gln Pro His Lys Ala Pro Arg Leu Gln Leu His Val Cys
 50 55 60
 Asp Lys Leu Gly Gly Arg Val Ala Ser
 65 70

<210> 2691

<211> 532

<212> DNA

<213> Homo sapiens

<400> 2691

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 120
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 180
 aacctcagca tgataagcca tgggcagcgg cagcgagtgg tccacgattt tcccaagtac
 240
 agtgtcaagg ttctgccgtg gctcagcccc gaggtcctcc agcagaatct ccagggttat
 300
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 360
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 480

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532

<210> 2692

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2692

Asp Leu Ile Cys Thr His Phe Met Asp Gly Met Asn Glu Leu Ala Ile
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20 25 30
Met Gly Tyr Val His Arg Ser Val Lys Ala Ser His Ile Leu Ile Ser
35 40 45
Val Asp Gly Lys Val Tyr Leu Ser Gly Leu Arg Ser Asn Leu Ser Met
50 55 60
Ile Ser His Gly Gln Arg Gln Arg Val Val His Asp Phe Pro Lys Tyr
65 70 75 80
Ser Val Lys Val Leu Pro Trp Leu Ser Pro Glu Val Leu Gln Gln Asn
85 90 95
Leu Gln Gly Tyr Asp Ala Lys Ser Asp Ile Tyr Ser Val Gly Ile Thr
100 105 110
Ala Cys Glu Leu Ala Asn Gly His Val Pro Phe Lys Asp Met Pro Ala
115 120 125
Thr Gln Met Leu Leu Glu Lys Leu Asn Gly Thr Val Pro Cys Leu Leu
130 135 140
Asp Thr Ser Thr Ile Pro Ala Glu Glu Leu Thr Met Ser Pro Ser Arg
145 150 155 160
Ser Val Ala Asn Ser Gly Leu Ser Asp Ser Leu Thr Thr Ser Thr Pro
165 170 175
Arg

<210> 2693

<211> 798

<212> DNA

<213> Homo sapiens

<400> 2693

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120
aagctgcagg agttccctgt ggccatccgg accctgggca gactgcagga actgggggttc
180
cataacaaca acatcaaggc catcccagaa aaggccttca tggggaaccc tctgctacag
240
acgatacact tttatgataa cccaatccag tttgtgggaa gatcggcatt ccagtacctg
300
cctaaactcc acacactatc tctgaatggt gccatggaca tccaggagtt tccagatctc
360
aaaggcacca ccagcctgga gatcctgacc ctgaccgcg caggcatccg gctgctccca
420

tcgggggatgt gccaacagct gccaggtc cgagtcctgg aactgtctca caatcaaatt
 480
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 540
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 660
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 720
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 798

<210> 2694

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2694

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Arg	Ile	Gln	His	Leu	Gly	Thr	His	Ser	Phe	Glu	Gly	Leu	His	Asn	Leu
		20					25					30			
Glu	Thr	Leu	Asp	Leu	Asn	Tyr	Asn	Lys	Leu	Gln	Glu	Phe	Pro	Val	Ala
	35						40				45				
Ile	Arg	Thr	Leu	Gly	Arg	Leu	Gln	Glu	Leu	Gly	Phe	His	Asn	Asn	Asn
	50				55					60					
Ile	Lys	Ala	Ile	Pro	Glu	Lys	Ala	Phe	Met	Gly	Asn	Pro	Leu	Leu	Gln
65				70					75					80	
Thr	Ile	His	Phe	Tyr	Asp	Asn	Pro	Ile	Gln	Phe	Val	Gly	Arg	Ser	Ala
			85				90						95		
Phe	Gln	Tyr	Leu	Pro	Lys	Leu	His	Thr	Leu	Ser	Leu	Asn	Gly	Ala	Met
		100					105						110		
Asp	Ile	Gln	Glu	Phe	Pro	Asp	Leu	Lys	Gly	Thr	Thr	Ser	Leu	Glu	Ile
	115						120					125			
Leu	Thr	Leu	Thr	Arg	Ala	Gly	Ile	Arg	Leu	Leu	Pro	Ser	Gly	Met	Cys
	130				135						140				
Gln	Gln	Leu	Pro	Arg	Leu	Arg	Val	Leu	Glu	Leu	Ser	His	Asn	Gln	Ile
145				150					155					160	
Glu	Glu	Leu	Pro	Ser	Leu	His	Arg	Cys	Gln	Lys	Leu	Glu	Glu	Ile	Gly
			165				170						175		
Leu	Gln	His	Asn	Arg	Ile	Trp	Glu	Ile	Gly	Ala	Asp	Thr	Phe	Ser	Gln
		180				185						190			
Leu	Ser	Ser	Leu	Gln	Ala	Leu	Asp	Leu	Arg	Trp	Asn	Ala	Ile	Arg	Ser
	195					200					205				
Ile	His	Pro	Glu	Ala	Phe	Ser	Thr	Leu	His	Ser	Leu	Val	Lys	Leu	Asp
	210					215					220				
Leu	Thr	Asp	Asn	Gln	Leu	Thr	Thr	Leu	Pro	Leu	Ala	Gly	Leu	Gly	Gly
225				230					235					240	
Leu	Met	His	Leu	Lys	Leu	Lys	Gly	Asn	Leu	Ala	Leu	Ser	Gln	Ala	Phe
			245				250						255		
Ser	Lys	Asp	Ser	Phe	Pro	Lys	Leu	Arg	Ile						

260

265

<210> 2695

<211> 2265

<212> DNA

<213> Homo sapiens

<400> 2695

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120
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180
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240
cctggggtag aggtgaccct gacgatgaaa gcggccagt gtagcacagg cgaccagaag
300
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360
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420
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480
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540
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600
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1080
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1140
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1200
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1260
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1320
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<210> 2696

<211> 663

<212> PRT

<213> Homo sapiens

<400> 2696

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			20					25					30		
Ala	Pro	Glu	Asp	Cys	Thr	Ser	Phe	Ser	Ile	Asn	Ala	Ser	Pro	Gly	Val
			35				40				45				
Val	Val	Asp	Ile	Ala	His	Ser	Pro	Pro	Ala	Lys	Lys	Lys	Ser	Thr	Gly
	50				55					60					
Ser	Ser	Thr	Trp	Pro	Leu	Asp	Pro	Gly	Val	Glu	Val	Thr	Leu	Thr	Met
65				70					75				80		
Lys	Ala	Ala	Ser	Gly	Ser	Thr	Gly	Asp	Gln	Lys	Val	Gln	Ile	Ser	Tyr
			85				90					95			
Tyr	Gly	Pro	Lys	Thr	Pro	Pro	Val	Lys	Ala	Leu	Leu	Tyr	Leu	Thr	Ala
			100				105					110			
Val	Glu	Ile	Ser	Leu	Cys	Ala	Asp	Ile	Thr	Arg	Thr	Gly	Lys	Val	Lys
		115				120						125			
Pro	Thr	Arg	Ala	Val	Lys	Asp	Gln	Arg	Thr	Trp	Thr	Trp	Gly	Pro	Cys

130		135		140
Gly Gln Gly Ala Ile Leu Leu Val Asn Cys Asp Arg Asp Asn Leu Glu				
145		150		155
Ser Ser Ala Met Asp Cys Glu Asp Asp Glu Val Leu Asp Ser Glu Asp				
	165		170	175
Leu Gln Asp Met Ser Leu Met Thr Leu Ser Thr Lys Thr Pro Lys Asp				
	180		185	190
Phe Phe Thr Asn His Thr Leu Val Leu His Val Ala Arg Ser Glu Met				
	195		200	205
Asp Lys Val Arg Val Phe Gln Ala Thr Arg Gly Lys Leu Ser Ser Lys				
	210		215	220
Cys Ser Val Val Leu Gly Pro Lys Trp Pro Ser His Tyr Leu Met Val				
225		230		235
Pro Gly Gly Lys His Asn Met Asp Phe Tyr Val Glu Ala Leu Ala Phe				
	245		250	255
Pro Asp Thr Asp Phe Pro Gly Leu Ile Thr Leu Thr Ile Ser Leu Leu				
	260		265	270
Asp Thr Ser Asn Leu Glu Leu Pro Glu Ala Val Val Phe Gln Asp Ser				
	275		280	285
Val Val Phe Arg Val Ala Pro Trp Ile Met Thr Pro Asn Thr Gln Pro				
	290		295	300
Pro Gln Glu Val Tyr Ala Cys Ser Ile Phe Glu Asn Glu Asp Phe Leu				
305		310		315
Lys Ser Val Thr Thr Leu Ala Met Lys Ala Lys Cys Lys Leu Thr Ile				
	325		330	335
Cys Pro Glu Glu Glu Asn Met Asp Asp Gln Trp Met Gln Asp Glu Met				
	340		345	350
Glu Ile Gly Tyr Ile Gln Ala Pro His Lys Thr Leu Pro Val Val Phe				
	355		360	365
Asp Ser Pro Arg Asn Arg Gly Leu Lys Glu Phe Pro Ile Lys Arg Val				
	370		375	380
Met Gly Pro Asp Phe Gly Tyr Val Thr Arg Gly Pro Gln Thr Gly Gly				
385		390		395
Ile Ser Gly Leu Asp Ser Phe Gly Asn Leu Glu Val Ser Pro Pro Val				
	405		410	415
Thr Val Arg Gly Lys Glu Tyr Pro Leu Gly Arg Ile Leu Phe Gly Asp				
	420		425	430
Ser Cys Tyr Pro Ser Asn Asp Ser Arg Gln Met His Gln Ala Leu Gln				
	435		440	445
Asp Phe Leu Ser Ala Gln Gln Val Gln Ala Pro Val Lys Leu Tyr Ser				
	450		455	460
Asp Trp Leu Ser Val Gly His Val Asp Glu Phe Leu Ser Phe Val Pro				
465		470		475
Ala Pro Asp Arg Lys Gly Phe Arg Leu Leu Leu Ala Ser Pro Arg Ser				
	485		490	495
Cys Tyr Lys Leu Phe Gln Glu Gln Gln Asn Glu Gly His Gly Glu Ala				
	500		505	510
Leu Leu Phe Glu Gly Ile Lys Lys Lys Lys Gln Gln Lys Ile Lys Asn				
	515		520	525
Ile Leu Ser Asn Lys Thr Leu Arg Glu His Asn Ser Phe Val Glu Arg				
	530		535	540
Cys Ile Asp Trp Asn Arg Glu Leu Leu Lys Arg Glu Leu Gly Leu Ala				
545		550		555
Glu Ser Asp Ile Ile Asp Ile Pro Gln Leu Phe Lys Leu Lys Glu Phe				
				560

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<400> 2697
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120
gtaactgacc ccaggaacat tctgttaacc aacgaacaac tcgagagtgc gagaaaaata
180
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240
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300
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420
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780
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900
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960
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1020

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1140
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<211> 332

<212> PRT

<213> Homo sapiens

<400> 2698

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 Arg Gln Gly Ile Val Pro Pro Gly Leu Thr Glu Asn Glu Leu Trp Arg
 65 70 75 80
 Ala Lys Tyr Ile Tyr Asp Ser Ala Phe His Pro Asp Thr Gly Glu Lys
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 Ile Thr Gly Cys Met Met Thr Phe Tyr Arg Thr Thr Pro Ala Val Leu
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 Arg Glu Leu Lys Val Gly Ile Pro Val Thr Asp Glu Asn Gly Asn Arg
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 Leu Gly Glu Ser Ala Asn Ala Ala Lys Gln Ala Ile Thr Gln Val Val
 225 230 235 240
 Val Ser Arg Ile Leu Met Ala Ala Pro Gly Met Ala Ile Pro Pro Phe
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 Ile Met Asn Thr Leu Glu Lys Lys Ala Phe Leu Lys Arg Phe Pro Trp
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 Met Ser Ala Pro Ile Gln Val Gly Leu Val Gly Phe Cys Leu Val Phe
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<210> 2699

<211> 974

<212> DNA

<213> Homo sapiens

<400> 2699

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<212> PRT

<213> Homo sapiens

<400> 2700

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Thr	Gln	Pro	Ala	Asp	Val	Leu	Arg	Trp	Ser	Ala	Gly	Tyr	Phe	Ser	Ala
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Val	Leu	His	Lys	Gln	Cys	His	His	Lys	Arg	Tyr	Val	Glu	Leu	Thr	Asp
			85					90					95		
Leu	Glu	Gln	Lys	Trp	Lys	Asn	Leu	Cys	Leu	Pro	Lys	Glu	Lys	Phe	Lys
			100				105					110			
Ala	Leu	Leu	Gln	Leu	Asp	Pro	Cys	Glu	Asn	Lys	Ile	Lys	Trp	Ile	Asn

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<210> 2701
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 <212> DNA
 <213> Homo sapiens

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 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 2702
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 <212> DNA
 <213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Ala Ser Arg Asn Ile Val Gln Asn Tyr Arg Ala Gly Val Val Thr Pro
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 Gly Ile Thr Glu Asp Gln Leu Trp Arg Ala Lys Tyr Val Tyr Asp Ser
 65 70 75 80
 Ala Phe His Pro Asp Thr Gly Glu Lys Val Val Leu Ile Gly Arg Met

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<210> 2707

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<212> DNA

<213> Homo sapiens

<400> 2707

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<210> 2708

<211> 337

<212> PRT

<213> Homo sapiens

<400> 2708

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 245 250 255
 Thr Val Ala Asn Lys Glu Tyr Val Ala Tyr Ser His Thr Gly Arg Ile
 260 265 270
 Ile Pro Ala Ile Trp Phe Arg Tyr Asp Leu Ser Pro Ile Thr Val Lys
 275 280 285
 Tyr Thr Glu Arg Arg Gln Pro Leu Tyr Arg Phe Ile Thr Thr Ile Cys
 290 295 300
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<210> 2709

<211> 984

<212> DNA

<213> Homo sapiens

<400> 2709

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<211> 242
<212> PRT
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Ala Ser Gly Gln Ala Lys Ser Ser Ser Lys Glu Ser Lys Asp Ser Lys
50 55 60
Thr Ser Ser Lys Asp Asp Lys Gly Ser Thr Ser Ser Thr Ser Gly Ser
65 70 75 80
Ser Gly Ser Ser Thr Lys Asn Ile Trp Val Ser Gly Leu Ser Ser Asn
85 90 95
Thr Lys Ala Ala Asp Leu Lys Asn Leu Phe Gly Lys Tyr Gly Lys Val
100 105 110
Leu Ser Ala Lys Val Val Thr Asn Ala Arg Ser Pro Gly Ala Lys Cys
115 120 125
Tyr Gly Ile Val Thr Met Ser Ser Ser Thr Glu Val Ser Arg Cys Ile
130 135 140
Ala His Leu His Arg Thr Glu Leu His Gly Gln Leu Ile Ser Val Glu
145 150 155 160
Lys Val Lys Gly Asp Pro Ser Lys Lys Glu Met Lys Lys Glu Asn Asp
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Glu Lys Ser Ser Ser Arg Ser Ser Gly Asp Lys Lys Asn Thr Ser Asp
180 185 190
Arg Ser Ser Lys Thr Gln Ala Ser Val Lys Lys Glu Glu Lys Arg Ser
195 200 205
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<212> DNA
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      35           40           45
Glu Glu Val Ala Pro Val Leu Gln Gln Thr Leu Leu Gln Asp Asn Leu
      50           55           60
Leu Gly Arg Val His Phe Asp Gln Phe Lys Glu Ala Leu Ile Leu Ile
      65           70           75           80
Leu Ser Arg Thr Leu Ser Asp Glu Glu His Phe Gln Glu Pro Asp Cys
      85           90           95
Ser Leu Glu Ala Gln Pro Arg Tyr Val Arg Gly Glu Lys Pro Tyr Gly
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Arg Arg Ser Leu Pro Glu Phe Gln Glu Ser Val Glu Glu Phe Pro Glu
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Val Thr Val Ile Glu Pro Leu Asp Glu Glu Ala Arg Pro Ser His Ile
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Tyr Glu Ala Glu Gly Gln Leu Arg Phe Trp Asn Pro Asp Asp Leu Asn
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Asn Arg Lys Lys Leu Val Ser Ile Cys Glu Gln Tyr Gly Leu Gln Asn
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Asn Gln Leu Lys Glu Gln Val Ser Leu Pro Gly His Leu Cys Ser Pro		
2065	2070	2075
Thr Ser His Ser Ser Phe Asn Ser Ser Phe Thr Ser Leu Tyr Cys His		
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<210> 2713

<211> 2066

<212> DNA

<213> Homo sapiens

<400> 2713

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<210> 2714

<211> 214

<212> PRT

<213> Homo sapiens

<400> 2714

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			20					25					30		
Leu	Val	Glu	Thr	Ser	Gly	Ile	Ser	Ile	Tyr	Arg	Leu	Leu	Asp	Lys	Lys
			35					40					45		
Thr	Gly	Leu	Tyr	Glu	Tyr	Lys	Val	Phe	Gly	Val	Leu	Glu	Asp	Cys	Ser
			50				55					60			
Pro	Thr	Leu	Leu	Ala	Asp	Ile	Tyr	Met	Asp	Ser	Asp	Tyr	Arg	Lys	Gln
65					70					75				80	
Trp	Asp	Gln	Tyr	Val	Lys	Glu	Leu	Tyr	Glu	Gln	Glu	Cys	Asn	Gly	Glu
			85					90						95	
Thr	Val	Val	Tyr	Trp	Glu	Val	Lys	Tyr	Pro	Phe	Pro	Met	Ser	Asn	Arg
			100					105						110	
Asp	Tyr	Val	Tyr	Leu	Arg	Gln	Arg	Arg	Asp	Leu	Asp	Met	Glu	Gly	Arg
			115					120					125		
Lys	Ile	His	Val	Ile	Leu	Ala	Arg	Ser	Thr	Ser	Met	Pro	Gln	Leu	Gly
			130				135					140			
Glu	Arg	Ser	Gly	Val	Ile	Arg	Val	Lys	Gln	Tyr	Lys	Gln	Ser	Leu	Ala
145					150					155				160	
Ile	Glu	Ser	Asp	Gly	Lys	Lys	Gly	Ser	Lys	Val	Phe	Met	Tyr	Tyr	Phe
			165					170						175	
Asp	Asn	Pro	Gly	Gly	Gln	Ile	Pro	Ser	Trp	Leu	Ile	Asn	Trp	Ala	Ala
			180					185					190		
Lys	Asn	Gly	Val	Pro	Asn	Phe	Leu	Lys	Asp	Met	Ala	Arg	Ala	Cys	Gln
			195				200						205		
Asn	Tyr	Leu	Lys	Lys	Thr										
			210												

<210> 2715
 <211> 378
 <212> DNA
 <213> Homo sapiens

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 180
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 240
 aaattaagag gaatggatga agtatacaac ctcttctatg tcaacaacaa ctggtatatt
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 360
 cggcaaattg aagaagaa
 378

<210> 2716
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 2716
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 Lys Ile Lys Gln Ile Met His His Phe Ile Pro Asp Leu Leu Phe Ala
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 Gln Arg Gly Asp Leu Ser Asp Val Glu Glu Glu Glu Glu Met
 35 40 45
 Asp Val Asp Glu Ala Thr Gly Ala Val Lys Lys His Asn Gly Val Gly
 50 55 60
 Gly Ser Pro Pro Lys Ser Lys Leu Leu Phe Ser Asn Thr Ala Ala Gln
 65 70 75 80
 Lys Leu Arg Gly Met Asp Glu Val Tyr Asn Leu Phe Tyr Val Asn Asn
 85 90 95
 Asn Trp Tyr Ile Phe Met Arg Leu His Gln Ile Leu Cys Leu Arg Leu
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 Leu Arg Ile Cys Ser Gln Ala Glu Arg Gln Ile Glu Glu Glu
 115 120 125

<210> 2717
 <211> 2076
 <212> DNA
 <213> Homo sapiens

<400> 2717
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720
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1320
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1380
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1440
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 1980
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 2076

<210> 2718

<211> 110

<212> PRT

<213> Homo sapiens

<400> 2718

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		20					25				30				
Glu	Gly	Pro	Arg	Pro	Glu	Asn	Thr	Leu	Gly	Leu	Ser	Ser	Pro	Ala	Gln
		35				40					45				
Thr	Thr	Gly	Glu	Gly	Ala	Gly	His	Arg	Pro	Leu	Thr	Ile	Leu	His	Pro
	50					55				60					
Lys	Thr	Gly	Gly	Gln	Gly	Ser	Asp	Ala	Thr	Leu	Leu	Phe	Val	Lys	Tyr
65				70					75					80	
Gly	Thr	Thr	Phe	Phe	Val	Leu	Phe	Glu	Val	Ser	Ser	Gly	Ser	Lys	Leu
			85					90					95		
Ser	Lys	Trp	Leu	Lys	Asn	Ala	Lys	Cys	Asn	Tyr	Thr	Asp	Leu		
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<210> 2719

<211> 546

<212> DNA

<213> Homo sapiens

<400> 2719

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 420

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<210> 2720
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 <212> PRT
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 35 40 45
 Leu Asp Val Pro Leu Glu Gln Glu Met Ala Lys Glu Asp Pro Val Cys
 50 55 60
 Ala Pro Glu Ser Met Gly Ser Glu Asp Met Leu Phe Met Leu Tyr Thr
 65 70 75 80
 Ser Gly Ser Thr Gly Met Pro Lys Gly Ile Val His Thr Gln Ala Gly
 85 90 95
 Tyr Leu Leu Tyr Ala Ala Leu Thr His Lys Leu Val Phe Asp His Gln
 100 105 110
 Pro Gly Asp Ile Phe Gly Cys Val Ala Asp Ile Gly Trp Ile Thr Gly
 115 120 125
 His Ser Tyr Val Val Tyr Gly Pro Leu Cys Asn Gly Ala Thr Ser Val
 130 135 140
 Leu Phe Glu Ser Thr Pro Val Tyr Pro Asn Ala Gly Arg Tyr Trp Glu
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 Thr Val Glu Arg Leu Lys Ile Asn Gln Phe Tyr Gly Ala Pro Thr Ala
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 Val Arg Leu Leu Leu Lys
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<210> 2721
 <211> 5912
 <212> DNA
 <213> Homo sapiens

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<210> 2722

<211> 508

<212> PRT

<213> Homo sapiens

<400> 2722

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Asp	Arg	Ser	Ala	Leu	Ala	Met	Trp	Leu	Asn	His	Leu	Glu	Asp	Arg
			20				25					30		
Ser	Thr	Ser	Phe	Gly	Gly	Gln	Asn	Arg	Gly	Arg	Ser	Asp	Ser	Val
			35			40						45		
Tyr	Gly	Gln	Thr	His	Tyr	Tyr	His	Gln	Arg	Gln	Asn	Ser	Asp	Lys
	50					55				60				
Leu	Asn	Gly	Trp	Gln	Asn	Ser	Arg	Asp	Ser	Gly	Ile	Cys	Ile	Asn
65				70						75				80
Ser	Asn	Trp	Gln	Asp	Lys	Ser	Met	Gly	Cys	Glu	Asn	Gly	His	Val
			85					90					95	
Leu	Tyr	Ser	Ser	Ser	Val	Pro	Thr	Thr	Ile	Asn	Thr	Ile	Gly	Thr
			100				105					110		
Ser	Thr	Ser	Thr	Asn	Val	Pro	Ala	Trp	Leu	Lys	Ser	Leu	Arg	Leu
			115				120					125		
Lys	Tyr	Ala	Ala	Leu	Phe	Ser	Gln	Met	Thr	Tyr	Glu	Glu	Met	Met
	130					135					140			
Leu	Thr	Glu	Cys	Gln	Leu	Glu	Ala	Gln	Asn	Val	Thr	Lys	Gly	Ala
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His	Lys	Ile	Val	Ile	Ser	Ile	Gln	Lys	Leu	Lys	Glu	Arg	Gln	Asn


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<210> 2723
<211> 1221
<212> DNA
<213> Homo sapiens
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<211> 404

<212> PRT

<213> Homo sapiens

<400> 2724

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Thr	Ile	His	Met	Phe	Gly	Asp	His	Thr	Asn	Arg	Val	Lys	Arg	Ile	Ala
			20					25					30		
Thr	Ala	Pro	Met	Trp	Pro	Asn	Thr	Phe	Trp	Ser	Ala	Ala	Glu	Asp	Gly
			35				40					45			
Leu	Ile	Arg	Gln	Tyr	Asp	Leu	Arg	Glu	Asn	Ser	Lys	His	Ser	Glu	Val
	50					55				60					
Leu	Ile	Asp	Leu	Thr	Glu	Tyr	Cys	Gly	Gln	Leu	Val	Glu	Ala	Lys	Cys

65					70					75				80	
Leu	Thr	Val	Asn	Pro	Gln	Asp	Asn	Asn	Cys	Leu	Ala	Val	Gly	Ala	Ser
				85					90					95	
Gly	Pro	Phe	Val	Arg	Leu	Tyr	Asp	Ile	Arg	Met	Ile	His	Asn	His	Arg
			100					105					110		
Lys	Ser	Met	Lys	Gln	Ser	Pro	Ser	Ala	Gly	Val	His	Thr	Phe	Cys	Asp
		115					120					125			
Arg	Gln	Lys	Pro	Leu	Pro	Asp	Gly	Ala	Ala	Gln	Tyr	Tyr	Val	Ala	Gly
		130				135					140				
His	Leu	Pro	Val	Lys	Leu	Pro	Asp	Tyr	Asn	Asn	Arg	Leu	Arg	Val	Leu
145				150					155					160	
Val	Ala	Thr	Tyr	Val	Thr	Phe	Ser	Pro	Asn	Gly	Thr	Glu	Leu	Leu	Val
			165						170				175		
Asn	Met	Gly	Gly	Glu	Gln	Val	Tyr	Leu	Phe	Asp	Leu	Thr	Tyr	Lys	Gln
		180						185					190		
Arg	Pro	Tyr	Thr	Phe	Leu	Leu	Pro	Arg	Lys	Cys	His	Ser	Ser	Gly	Glu
		195					200					205			
Val	Gln	Asn	Gly	Lys	Met	Ser	Thr	Asn	Gly	Val	Ser	Asn	Gly	Val	Ser
	210					215					220				
Asn	Gly	Leu	His	Leu	His	Ser	Asn	Gly	Phe	Arg	Leu	Pro	Glu	Ser	Arg
225				230					235					240	
Gly	His	Val	Ser	Pro	Gln	Val	Glu	Leu	Pro	Tyr	Leu	Glu	Arg	Val	
			245						250				255		
Lys	Gln	Gln	Ala	Asn	Glu	Ala	Phe	Ala	Cys	Gln	Gln	Trp	Thr	Gln	Ala
		260						265					270		
Ile	Gln	Leu	Tyr	Ser	Lys	Ala	Val	Gln	Arg	Ala	Pro	His	Asn	Ala	Met
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Leu	Tyr	Gly	Asn	Arg	Ala	Ala	Ala	Tyr	Met	Lys	Arg	Lys	Trp	Asp	Gly
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Asp	His	Tyr	Asp	Ala	Leu	Arg	Asp	Cys	Leu	Lys	Ala	Ile	Ser	Leu	Asn
305				310					315					320	
Pro	Cys	His	Leu	Lys	Ala	His	Phe	Arg	Leu	Ala	Arg	Cys	Leu	Phe	Glu
			325						330				335		
Leu	Lys	Tyr	Val	Ala	Glu	Ala	Leu	Glu	Cys	Leu	Asp	Asp	Phe	Lys	Gly
		340						345					350		
Lys	Phe	Pro	Glu	Gln	Ala	His	Ser	Ser	Ala	Cys	Asp	Ala	Leu	Gly	Arg
	355						360				365				
Asp	Ile	Thr	Ala	Ala	Leu	Phe	Ser	Lys	Asn	Asp	Gly	Glu	Glu	Lys	Lys
	370					375					380				
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<210> 2725

<211> 856

<212> DNA

<213> Homo sapiens

<400> 2725

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120

aagggttctta aagaagtcag ggtgcaggat gagaacaacg tttgttttga gtgtggcgcg
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 720
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<210> 2726

<211> 148

<212> PRT

<213> Homo sapiens

<400> 2726

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 20 25 30
 Val Ser Val Thr Tyr Gly Ile Trp Ile Cys Leu Glu Cys Ser Gly Arg
 35 40 45
 His Arg Gly Leu Gly Val His Leu Ser Phe Val Arg Ser Val Thr Met
 50 55 60
 Asp Lys Trp Lys Asp Ile Glu Leu Glu Lys Met Lys Ala Gly Gly Asn
 65 70 75 80
 Ala Lys Phe Arg Glu Phe Leu Glu Ser Gln Glu Asp Tyr Asp Pro Cys
 85 90 95
 Trp Ser Leu Gln Glu Lys Tyr Asn Ser Arg Ala Ala Ala Leu Phe Arg
 100 105 110
 Asp Lys Val Val Ala Leu Ala Glu Gly Arg Glu Trp Ser Leu Glu Ser
 115 120 125
 Ser Pro Ala Gln Asn Trp Thr Pro Pro Gln Pro Arg Thr Leu Pro Ser
 130 135 140
 Met Val His Arg
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<210> 2727
 <211> 1119
 <212> DNA
 <213> Homo sapiens

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 taaatctggg atattaaatt gtgctgtaaa tagatttgta tattttcttt tttagagtact
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 240
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 300
 gattcattta gactattcga tttaggaagg tacaaccact tctttaacat caagctaaaa
 360
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 420
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 480
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 600
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 660
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 720
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 780
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<210> 2728
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 2728
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 Ile Thr Thr Leu Asp Pro Gly Met Ala Pro Tyr Ile Lys Ser Gly Gly

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	35		40		45
Val	Arg	Asp	Ala	Phe	Gln
	50		55		60
Glu	Ala	Gly	Gln	Ser	Asn
	65		70		75
Gly	Leu	Lys	Gly	Ala	Gln
			85		90
Val	Ile	His	Glu	Lys	Gln
			100		105
Glu	Leu	Leu	Pro	Asp	Lys
			115		120
Asp	Pro	Val	His	Gly	Ile
			130		135
Val	Pro	Leu	Glu	Phe	Val
			145		150
Tyr	Asn	Leu	Arg	Trp	Ser
			165		170
Glu	Lys	Ser	Leu	Leu	Asn
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Thr	Gly	Met	Ser	Arg	Arg
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Ala	Gly	Met	Tyr	Lys	Gln
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<210> 2729

<211> 393

<212> DNA

<213> Homo sapiens

<400> 2729

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120

agctgctctg ccacgagatc ttctgagaag cacgtgaatt ctgctgactc tccaccctcc
180

agttcctctt cctcttccat actaagggcc tggcttgacc agtgtgcaga agacttccga
240

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360

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<210> 2730

<211> 92

<212> PRT

<213> Homo sapiens

<400> 2730

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      20           25           30
Leu Asp Gln Cys Ala Glu Asp Phe Arg Glu Pro Pro His Phe Pro Cys
      35           40           45
Leu Gln Lys Leu Leu Asp Tyr Leu Thr Arg Met Met Pro Gly Ser Asp
      50           55           60
Pro Glu Arg Arg Ala Gln Asn Leu Leu Glu Gln Phe Gln Lys Gln Glu
      65           70           75           80
Val Glu Thr Asp Asn Gly Leu Pro Asn Thr Ile Ser
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<210> 2731

<211> 447

<212> DNA

<213> Homo sapiens.

<400> 2731

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120
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180
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360
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<210> 2732

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2732

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Ile Gly Val Thr Cys Val Phe Pro Ile Asp Leu Ala Lys Thr Arg Leu
      20           25           30
Gln Asn Gln Gln Asn Gly Gln Arg Val Tyr Thr Ser Met Ser Asp Cys
      35           40           45
Leu Ile Lys Thr Val Arg Ser Glu Gly Tyr Phe Gly Met Tyr Arg Gly
      50           55           60
Ala Ala Val Asn Leu Thr Leu Val Thr Pro Glu Lys Ala Ile Lys Leu
      65           70           75           80
Ala Ala Asn Asp Phe Arg His Gln Leu Ser Lys Asp Gly Gln Lys
      85           90           95
Leu Thr Leu Leu Lys Glu Met Leu Ala Gly Cys Gly Ala Gly Thr Cys

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 Gln Val Ile Val Thr Thr Pro Met Glu Met Leu Lys Ile
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<210> 2733

<211> 3619

<212> DNA

<213> Homo sapiens

<400> 2733

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<210> 2734

<211> 790

<212> PRT

<213> Homo sapiens

<400> 2734

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Val	Met	Asp	Lys	Leu	Arg	Leu	Ala	Glu	Leu	Thr	Val	Asp	Glu	Phe	Leu
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Ala	Ser	Gly	Phe	Asp	Ser	Glu	Ser	Glu	Ser	Glu	Ser	Glu	Asn	Ser	Pro
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Gln	Ala	Glu	Thr	Arg	Glu	Ala	Arg	Glu	Ala	Ala	Arg	Ser	Pro	Asp	Lys
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His	Lys	Asp	Gln	Leu	Ser	Arg	Leu	Lys	Asp	Arg	Asp	Pro	Glu	Phe	Tyr
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Arg Asp Leu Ile Gly Cys Leu Gln Lys Leu Leu Phe Gly Lys Val Ala		
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Lys Leu Arg Val Asp Ile Lys Ala Tyr Leu Gly Ser Ala Ile Gln Leu		
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Ile Ser Val Leu Val Pro Cys Phe Leu Thr Phe Pro Lys Gln Cys Arg		
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Met Leu Leu Lys Arg Met Val Val Val Trp Ser Thr Gly Glu Glu Ser		
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Leu Arg Val Leu Ala Phe Leu Val Leu Ser Arg Val Cys Arg His Lys		
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Lys Asp Thr Phe Leu Gly Pro Val Leu Lys Gln Met Tyr Ile Thr Tyr		
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Val Arg Asn Cys Lys Phe Thr Ser Pro Gly Ala Leu Pro Phe Ile Ser		
370	375	380
Phe Met Gln Trp Thr Leu Thr Glu Leu Leu Ala Leu Glu Pro Gly Val		
385	390	395
Ala Tyr Gln His Ala Phe Leu Tyr Ile Arg Gln Leu Ala Ile His Leu		
405	410	415
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Asn Trp Gln Tyr Val His Cys Leu Phe Leu Trp Cys Arg Val Leu Ser		
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Thr Ala Gly Pro Ser Glu Ala Leu Gln Pro Leu Val Tyr Pro Leu Ala		
450	455	460
Gln Val Ile Ile Gly Cys Ile Lys Leu Ile Pro Thr Ala Arg Phe Tyr		
465	470	475
Pro Leu Arg Met His Cys Ile Arg Ala Leu Thr Leu Leu Ser Gly Ser		
485	490	495
Ser Gly Ala Phe Ile Pro Val Leu Pro Phe Ile Leu Glu Met Phe Gln		
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Gln Val Asp Phe Asn Arg Lys Pro Gly Arg Met Ser Ser Lys Pro Ile		
515	520	525
Asn Phe Ser Val Ile Leu Lys Leu Ser Asn Val Asn Leu Gln Glu Lys		
530	535	540
Ala Tyr Arg Asp Gly Leu Val Glu Gln Leu Tyr Asp Leu Thr Leu Glu		
545	550	555
Tyr Leu His Ser Gln Ala His Cys Ile Gly Phe Pro Glu Leu Val Leu		
565	570	575
Pro Val Val Leu Gln Leu Lys Ser Phe Leu Arg Glu Cys Lys Val Ala		
580	585	590
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Ser Ala Tyr Ile Cys Ser Arg Arg Gln Arg Val Ser Phe Gly Val Ser		

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Glu Ile Gln Leu Glu Ile Ser Gly Lys Glu Arg Val Arg Leu Gly Glu		655
	660	665
Gly Thr Trp Leu Glu Asp Leu Asn Phe Pro Glu Ile Lys Arg Arg Lys		670
	675	680
Met Ala Asp Arg Lys Asp Glu Asp Arg Lys Gln Phe Lys Asp Leu Phe		685
	690	695
Asp Leu Asn Ser Ser Glu Glu Asp Asp Thr Glu Gly Phe Leu Glu Arg		700
705	710	715
Gly Ile Leu Gly Pro Leu Ser Thr Arg His Gly Val Glu Asp Asp Glu		720
	725	730
Glu Asp Glu Glu Gly Glu Glu Asp Ser Ser Asn Ser Glu Gly Glu		735
	740	745
Trp Ser Trp Asp Gly Asp Pro Asp Ala Glu Ala Gly Leu Ala Pro Gly		750
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Gln Leu Ser Glu Asp Asp		780
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<210> 2735

<211> 1666

<212> DNA

<213> Homo sapiens

<400> 2735

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240
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720

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<210> 2736

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2736

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		20					25					30			
Phe	His	Ser	Ser	His	Ile	Ser	Thr	Ile	Gly	Val	Asp	Phe	Lys	Met	Lys
	35					40				45					
Thr	Ile	Glu	Val	Asp	Gly	Ile	Lys	Val	Arg	Ile	Gln	Ile	Trp	Asp	Thr
	50				55					60					
Ala	Gly	Gln	Glu	Arg	Tyr	Gln	Thr	Ile	Thr	Lys	Gln	Tyr	Tyr	Arg	Arg
65				70				75						80	
Ala	Gln	Gly	Ile	Phe	Leu	Val	Tyr	Asp	Ile	Ser	Ser	Glu	Arg	Ser	Tyr
		85						90						95	
Gln	His	Ile	Met	Lys	Trp	Val	Ser	Asp	Val	Asp	Glu	Tyr	Ala	Pro	Glu
	100						105					110			
Gly	Val	Gln	Lys	Ile	Leu	Ile	Gly	Asn	Lys	Ala	Asp	Glu	Glu	Gln	Lys

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Arg Gln Val Gly Arg Glu Gln Gly Gln Gln Lys Cys Pro Ser Leu Gln		
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145	150	155
Asn Leu Asn Ile Lys Glu Ser Phe Thr Arg Leu Thr Glu Leu Val Leu		
165	170	175
Gln Ala His Arg Lys Glu Leu Glu Gly Leu Arg Met Arg Ala Ser Asn		
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<210> 2737

<211> 898

<212> DNA

<213> Homo sapiens

<400> 2737

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<210> 2738

<211> 299

<212> PRT

<213> Homo sapiens

<400> 2738

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 35 40 45
 Lys Tyr Val Ala Asp Val Leu Pro Gly Lys Asn Gln Arg Ala Val Ser
 50 55 60
 Met Ala Ser Ala Ala Arg Glu Leu Val Ile Gln Arg Leu Ser Leu Val
 65 70 75 80
 Arg Ser Leu Cys Glu Ser Glu Glu Gln Arg Leu Leu Glu Gln Val His
 85 90 95
 Gly Glu Glu Glu Arg Ala His Gln Ser Ile Leu Thr Gln Arg Val His
 100 105 110
 Trp Ala Glu Ala Leu Gln Lys Leu Asp Thr Ile Arg Thr Gly Leu Val
 115 120 125
 Gly Met Leu Thr His Leu Asp Asp Leu Gln Leu Ile Gln Lys Glu Gln
 130 135 140
 Glu Ile Phe Glu Arg Thr Glu Glu Ala Glu Gly Ile Leu Asp Pro Gln
 145 150 155 160
 Glu Ser Glu Met Leu Asn Phe Asn Glu Lys Cys Thr Arg Ser Pro Leu
 165 170 175
 Leu Thr Gln Leu Trp Ala Thr Ala Val Leu Gly Ser Leu Ser Gly Thr
 180 185 190
 Glu Asp Ile Arg Ile Asp Glu Arg Thr Val Ser Pro Phe Leu Gln Leu
 195 200 205
 Ser Asp Asp Arg Lys Thr Leu Thr Ser Ala Pro Arg Ser Gln Arg Cys
 210 215 220
 Ala Asp Gly Pro Glu Arg Phe Asp His Trp Pro Asn Ala Leu Ala Ala
 225 230 235 240
 Thr Ser Phe Gln Asn Gly Leu His Ala Trp Met Val Asn Val Gln Asn
 245 250 255
 Ser Cys Ala Tyr Lys Val Gly Val Ala Ser Gly His Leu Pro Arg Lys
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<210> 2739

<211> 1501

<212> DNA

<213> Homo sapiens

<400> 2739

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<210> 2740

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2740

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Ile Ile Ser	Gly Val Val Ser Leu Phe	Ile Phe Gly Phe Cys	Trp Leu
	35	40	45
Ser Pro Ala	Leu Gln Asp Leu Gln Ala Thr	Glu Ala Asn Cys	Thr Val
	50	55	60
Leu Ser Val	Gln Gln Ile Gly Glu Val Phe	Glu Cys Thr Phe	Thr Cys
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Gly Ala Asp	Cys Arg Gly Thr Ser Gln Tyr	Pro Cys Val Gln	Val Tyr
	85	90	95
Val Asn Asn	Ser Glu Ser Asn Ser Arg Ala	Leu Leu His Ser	Asp Glu
	100	105	110
His Gln Leu	Leu Thr Asn Pro Lys Cys Ser	Tyr Ile Pro Pro	Cys Lys
	115	120	125
Arg Glu Asn	Gln Lys Asn Leu Glu Ser Val	Met Asn Trp Gln	Gln Tyr
	130	135	140
Trp Lys Asp	Glu Ile Gly Ser Gln Pro Phe	Thr Cys Tyr Phe	Asn Gln
145		150	155
His Gln Arg	Pro Asp Asp Val Leu Leu His	Arg Thr His Asp	Glu Ile
	165	170	175
Val Leu Leu	His Cys Phe Leu Trp Pro Leu	Val Thr Phe Val	Val Gly
	180	185	190
Val Leu Ile	Val Val Leu Thr Ile Cys Ala	Lys Ser Leu Ala	Val Lys
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Ala Glu Ala	Met Lys Lys Arg Lys Phe	Ser	
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<210> 2741

<211> 1487

<212> DNA

<213> Homo sapiens

<400> 2741

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<210> 2742

<211> 163

<212> PRT

<213> Homo sapiens

<400> 2742

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 Lys Phe Ser Cys Cys Gly Gly Ile Ser Tyr Lys Asp Trp Ser Gln Asn
 35 40 45
 Met Tyr Phe Asn Cys Ser Glu Asp Asn Pro Ser Arg Glu Arg Cys Ser
 50 55 60
 Val Pro Tyr Ser Cys Cys Leu Pro Thr Pro Asp Gln Ala Val Ile Asn
 65 70 75 80
 Thr Met Cys Gly Gln Gly Met Gln Ala Phe Asp Tyr Leu Glu Ala Ser
 85 90 95
 Lys Val Ile Tyr Thr Asn Gly Cys Ile Asp Lys Leu Val Asn Trp Ile
 100 105 110
 His Ser Asn Leu Phe Leu Leu Gly Gly Val Ala Leu Gly Leu Ala Ile
 115 120 125
 Pro Gln Leu Val Gly Ile Leu Leu Ser Gln Ile Leu Val Asn Gln Ile

130 135 140
 Lys Asp Gln Ile Lys Leu Gln Leu Tyr Asn Gln Gln His Arg Ala Asp
 145 150 155 160
 Pro Trp Tyr

<210> 2743
 <211> 384
 <212> DNA
 <213> Homo sapiens

<400> 2743
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 <212> PRT
 <213> Homo sapiens

<400> 2744
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<210> 2745
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 <212> DNA
 <213> Homo sapiens

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<210> 2746

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2746

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			20					25					30		
Ser	Gly	Glu	Lys	Leu	Pro	Asp	Gln	Pro	Phe	Thr	His	His	Ser	Gln	Glu
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		50				55					60				
Thr	Ala	Lys	Arg	Gly	Leu	Ser	His	Leu	Glu	Arg	Asn	Phe	Gln	Thr	Ser
65					70				75					80	
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<210> 2747

<211> 1100

<212> DNA

<213> Homo sapiens

<400> 2747

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<210> 2748

<211> 205

<212> PRT

<213> Homo sapiens

<400> 2748

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 35 40 45
 Gly Cys Phe Ala Cys Val Ser Lys Pro Pro Ala Leu Gln Ala Pro Ala
 50 55 60
 Ala Pro Ala Pro Glu Pro Ser Ala Ser Pro Pro Met Ala Pro Thr Leu
 65 70 75 80
 Phe Pro Met Glu Ser Lys Ser Ser Lys Thr Asp Ser Val Arg Ala Ala
 85 90 95
 Gly Ala Pro Pro Ala Cys Lys His Leu Ala Glu Lys Lys Thr Met Thr

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      130      135      140
Cys Leu Gly Phe Ile Ala Leu Ala Tyr Ser Leu Lys Val Arg Asp Lys
      145      150      155      160
Lys Leu Leu Asn Asp Leu Asn Gly Ala Val Glu Asp Ala Lys Thr Ala
      165      170      175
Arg Leu Phe Asn Ile Thr Ser Ser Ala Leu Ala Ala Ser Cys Ile Ile
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Leu Val Phe Ile Phe Leu Arg Tyr Pro Leu Thr Asp Tyr
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<210> 2749

<211> 2050

<212> DNA

<213> Homo sapiens

<400> 2749

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1020

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<211> 332

<212> PRT

<213> Homo sapiens

<400> 2750

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Ile	Cys	Thr	Arg	Thr	Val	Gln	His	Gln	Asp	Ser	Gln	Val	Asn	Ala	Leu
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Glu	Val	Thr	Pro	Asp	Arg	Ser	Met	Ile	Ala	Ala	Ala	Val	Gln	Pro	Val
		50				55					60				
Ser	Leu	Gly	Tyr	Gln	His	Ile	Arg	Met	Tyr	Asp	Leu	Asn	Ser	Asn	Asn
65				70				75					80		
Pro	Asn	Pro	Ile	Ile	Ser	Tyr	Asp	Gly	Val	Asn	Lys	Asn	Ile	Ala	Ser

				85					90					95	
Val	Gly	Phe	His	Glu	Asp	Gly	Arg	Trp	Met	Tyr	Thr	Gly	Gly	Glu	Asp
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Cys	Thr	Ala	Arg	Ile	Trp	Asp	Leu	Arg	Ser	Arg	Asn	Leu	Gln	Cys	Gln
		115					120					125			
Arg	Ile	Phe	Gln	Val	Asn	Ala	Pro	Ile	Asn	Cys	Val	Cys	Leu	His	Pro
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Trp	Asp	Leu	Lys	Thr	Asp	His	Asn	Glu	Gln	Leu	Ile	Pro	Glu	Pro	Glu
			165					170				175			
Val	Ser	Ile	Thr	Ser	Ala	His	Ile	Asp	Pro	Asp	Ala	Ser	Tyr	Met	Ala
			180					185				190			
Ala	Val	Asn	Ser	Thr	Gly	Asn	Cys	Tyr	Val	Trp	Asn	Leu	Thr	Gly	Gly
	195					200					205				
Ile	Gly	Asp	Glu	Val	Thr	Gln	Leu	Ile	Pro	Lys	Thr	Lys	Ile	Pro	Ala
	210					215					220				
His	Thr	Arg	Tyr	Ala	Leu	Gln	Cys	Arg	Phe	Ser	Pro	Asp	Ser	Thr	Leu
225				230						235				240	
Leu	Ala	Thr	Cys	Ser	Ala	Asp	Gln	Thr	Cys	Lys	Ile	Trp	Arg	Thr	Ser
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Glu	Ser	Ser	Arg	Gly	Trp	Met	Trp	Gly	Cys	Ala	Phe	Ser	Gly	Asp	Ser
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Gln	Tyr	Ile	Val	Thr	Ala	Ser	Ser	Asp	Asn	Leu	Ala	Arg	Leu	Trp	Cys
	290					295					300				
Val	Glu	Thr	Gly	Glu	Ile	Lys	Arg	Glu	Tyr	Gly	Gly	His	Gln	Lys	Ala
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<210> 2751

<211> 1877

<212> DNA

<213> Homo sapiens

<400> 2751

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420

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<210> 2752

<211> 87

<212> PRT

<213> Homo sapiens

<400> 2752

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 Thr Ala Pro Arg Ser Ala Ile Thr Arg Arg Ala Phe Thr Ser Thr Arg
 35 40 45
 Pro Pro Pro Thr Thr Arg Thr Val Ala Ser Ser Gly Thr His Thr Ser
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 Gly Leu Ser Pro Thr Ala Ser Arg Pro Ala Arg Cys Arg Ala Pro Gly
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<210> 2753

<211> 2561

<212> DNA

<213> Homo sapiens

<400> 2753

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<210> 2754

<211> 731

<212> PRT

<213> Homo sapiens

<400> 2754

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His Pro Thr Ala Pro Cys Ile Gln Glu Phe Leu Thr Leu Leu Ala Val
      35           40           45
Cys His Thr Val Val Pro Glu Lys Asp Gly Asp Asn Ile Ile Tyr Gln
      50           55           60
Ala Ser Ser Pro Asp Glu Ala Ala Leu Val Lys Gly Ala Lys Lys Leu
      65           70           75           80
Gly Phe Val Phe Thr Ala Arg Thr Pro Phe Ser Val Ile Ile Glu Ala
      85           90           95
Met Gly Gln Glu Gln Thr Phe Gly Ile Leu Asn Val Leu Glu Phe Ser
      100           105           110
Ser Asp Arg Lys Arg Met Ser Val Ile Val Arg Thr Pro Ser Gly Arg
      115           120           125
Leu Arg Leu Tyr Cys Lys Gly Ala Asp Asn Val Ile Phe Glu Arg Leu
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Phe Ala Thr Glu Gly Leu Arg Thr Leu Cys Val Ala Tyr Ala Asp Leu
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Ser Glu Gly Asn Glu Tyr Glu Glu Trp Leu Lys Val Tyr Gln Glu Ala
      180           185           190
Ser Thr Ile Leu Lys Asp Arg Ala Gln Arg Leu Glu Glu Cys Tyr Glu
      195           200           205
Ile Ile Glu Lys Asn Leu Leu Leu Leu Gly Ala Thr Ala Ile Glu Asp
      210           215           220
Arg Leu Gln Ala Gly Val Pro Glu Thr Ile Ala Thr Leu Leu Lys Ala
      225           230           235           240
Glu Ile Lys Ile Trp Val Leu Thr Gly Asp Lys Gln Glu Thr Ala Ile
      245           250           255
Asn Ile Gly Tyr Ser Cys Arg Leu Val Ser Gln Asn Met Ala Leu Ile
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Leu Leu Lys Gly Asp Ser Leu Asp Ala Thr Arg Ala Ala Ile Thr Gln
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His Cys Thr Asp Leu Gly Asn Leu Leu Gly Lys Glu Asn Asp Val Ala
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      305           310           315           320
Arg Arg Ser Phe Leu Asp Leu Ala Leu Ser Cys Lys Ala Val Ile Cys
      325           330           335
Cys Arg Val Ser Pro Leu Gln Lys Ser Glu Ile Val Asp Val Val Lys
      340           345           350
Lys Arg Val Lys Ala Ile Thr Leu Ala Ile Gly Asp Gly Ala Asn Asp
      355           360           365
Val Gly Met Ile Gln Thr Ala His Val Gly Val Gly Ile Ser Gly Asn
      370           375           380
Glu Gly Met Gln Ala Thr Asn Asn Ser Asp Tyr Ala Ile Ala Gln Phe

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<213> Homo sapiens

<400> 2754

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Cys His Thr Val Val Pro Glu Lys Asp Gly Asp Asn Ile Ile Tyr Gln
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Ala Ser Ser Pro Asp Glu Ala Ala Leu Val Lys Gly Ala Lys Lys Leu
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Ser Asp Arg Lys Arg Met Ser Val Ile Val Arg Thr Pro Ser Gly Arg
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Leu Arg Leu Tyr Cys Lys Gly Ala Asp Asn Val Ile Phe Glu Arg Leu
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Ser Lys Asp Ser Lys Tyr Met Glu Glu Thr Leu Cys His Leu Glu Tyr
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Phe Ala Thr Glu Gly Leu Arg Thr Leu Cys Val Ala Tyr Ala Asp Leu
 165          170          175
Ser Glu Gly Asn Glu Tyr Glu Glu Trp Leu Lys Val Tyr Gln Glu Ala
 180          185          190
Ser Thr Ile Leu Lys Asp Arg Ala Gln Arg Leu Glu Glu Cys Tyr Glu
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Ile Ile Glu Lys Asn Leu Leu Leu Leu Gly Ala Thr Ala Ile Glu Asp
 210          215          220
Arg Leu Gln Ala Gly Val Pro Glu Thr Ile Ala Thr Leu Leu Lys Ala
 225          230          235          240
Glu Ile Lys Ile Trp Val Leu Thr Gly Asp Lys Gln Glu Thr Ala Ile
 245          250          255
Asn Ile Gly Tyr Ser Cys Arg Leu Val Ser Gln Asn Met Ala Leu Ile
 260          265          270
Leu Leu Lys Gly Asp Ser Leu Asp Ala Thr Arg Ala Ala Ile Thr Gln
 275          280          285
His Cys Thr Asp Leu Gly Asn Leu Leu Gly Lys Glu Asn Asp Val Ala
 290          295          300
Leu Ile Ile Asp Gly His Thr Leu Lys Tyr Ala Leu Ser Phe Glu Val
 305          310          315          320
Arg Arg Ser Phe Leu Asp Leu Ala Leu Ser Cys Lys Ala Val Ile Cys
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Cys Arg Val Ser Pro Leu Gln Lys Ser Glu Ile Val Asp Val Val Lys
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Lys Arg Val Lys Ala Ile Thr Leu Ala Ile Gly Asp Gly Ala Asn Asp
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Val Gly Met Ile Gln Thr Ala His Val Gly Val Gly Ile Ser Gly Asn
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Ile Leu Phe Glu Arg Trp Cys Ile Gly Leu Tyr Asn Val Ile Phe Thr
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Glu Gly Phe Asn Thr Lys Val Phe Trp Gly His Cys Ile Asn Ala Leu
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Val His Ser Leu Ile Leu Phe Trp Phe Pro Met Lys Ala Leu Glu His
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Pro Thr Ile Pro Ile Ala Pro Asp Met Arg Gly Gln Ala Thr Met Val
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Leu Ser Ser Ala His Phe Trp Leu Gly Leu Phe Leu Val Pro Thr Ala
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Cys Leu Ile Glu Asp Val Ala Trp Arg Ala Ala Lys His Thr Cys Lys
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Lys Thr Leu Leu Glu Glu Val Gln Glu Leu Glu Thr Lys Ser Arg Val
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Leu Gly Lys Ala Val Leu Arg Asp Ser Asn Gly Lys Arg Leu Asn Glu
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Arg Asp Arg Leu Ile Lys Arg Leu Gly Arg Lys Thr Pro Pro Thr Leu
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Phe Arg Gly Ser Ser Leu Gln Gln Gly Val Pro His Gly Tyr Ala Phe
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<210> 2755

<211> 4795

<212> DNA

<213> Homo sapiens

<400> 2755

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<212> PRT

<213> Homo sapiens

<400> 2756

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Ala Lys Glu Asn Leu Lys Lys Ile Gln Glu Met Glu Lys Ser Asp Glu
50      55      60
Ser Ser Thr Asp Leu Glu Glu Leu Lys Asn Ala Asp Trp Ala Arg Phe
65      70      75      80
Trp Val Gln Val Met Arg Asp Leu Arg Asn Gly Val Lys Leu Lys Lys
85      90      95
Val Gln Glu Arg Gln Tyr Asn Pro Leu Pro Ile Glu Tyr Gln Leu Thr
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Pro Tyr Glu Met Leu Met Asp Asp Ile Arg Cys Lys Arg Tyr Thr Leu
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Arg Lys Val Met Val Asn Gly Asp Ile Pro Pro Arg Leu Lys Lys Ser
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Leu His Glu Arg Ile Leu Glu Glu Ile Lys Ala Glu Arg Lys Leu Arg
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Pro Val Ser Pro Glu Glu Ile Arg Arg Ser Arg Leu Asp Val Thr Thr
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Pro Glu Ser Thr Lys Asn Leu Val Glu Ser Ser Met Val Asn Gly Gly
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Leu Thr Ser Gln Thr Lys Glu Asn Gly Leu Ser Thr Ser Gln Gln Val
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Pro Ala Gln Arg Lys Lys Leu Leu Arg Ala Pro Thr Leu Ala Glu Leu
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Ser Ser Val Ser Pro Ser Phe Pro Glu Glu Pro Val Leu Glu Ala Val
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Ser Thr Arg Lys Lys Pro Pro Lys Phe Leu Pro Ile Ser Ser Thr Pro
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Gln Pro Glu Arg Arg Gln Pro Pro Gln Arg Arg His Ser Ile Glu Lys
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Glu Thr Pro Thr Asn Val Arg Gln Phe Leu Pro Pro Ser Arg Gln Ser
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Thr Val Glu Glu Val Met His Ile Arg Gln Val Leu Val Lys Ala Glu
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Leu Glu Lys Tyr Gln Gln Tyr Lys Asp Ile Tyr Thr Ala Leu Lys Lys
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Gly Lys Leu Cys Phe Cys Cys Arg Thr Arg Arg Phe Ser Phe Phe Thr
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Trp Ser Tyr Thr Cys Gln Phe Cys Lys Arg Pro Val Cys Ser Gln Cys
405     410     415
Cys Lys Lys Met Arg Leu Pro Ser Lys Pro Tyr Ser Thr Leu Pro Ile

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Arg Phe Ser Ser Lys Ser Lys Ser Met Asp Lys Ser Asp Glu Glu Leu
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Gln Phe Pro Lys Glu Leu Met Glu Asp Trp Ser Thr Met Glu Val Cys
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Val Asp Cys Lys Lys Phe Ile Ser Glu Ile Ile Ser Ser Ser Arg Arg
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Ser Leu Val Leu Ala Asn Lys Arg Ala Arg Leu Lys Arg Lys Thr Gln
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Ser Phe Tyr Met Ser Ser Pro Gly Pro Ser Glu Tyr Cys Pro Ser Glu
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<212> DNA

<213> Homo sapiens

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<210> 2758

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1999

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 Thr Arg Glu Gly Pro Gln Val Ser Glu Asn Leu Gln Lys Thr Glu Leu
 1 5 10 15
 Ser Asp Gly Lys Ser Ile Glu Pro Gly Gly Ile Asp Ile Thr Leu Ser
 20 25 30
 Ser Ser Leu Ser Gln Ala Gly Asp Pro Ile Thr Glu Gly Asn Lys Glu
 35 40 45
 Pro Asp Lys Thr Trp Val Lys Lys Gly Glu Pro Leu Pro Val Lys Leu